INTRODUCTION

We Become What We Measure

The significant problems we face cannot be solved by
the same level of thinking that created them.

—Albert Einstein

This book tells the story of an invention—an invention that grew, in one single lifetime, from narrow tool to global rule. Today, this invention provides the underlying rationale for much of what we do, even if we strongly dislike some of its results. People and governments around the world follow its logic, independent of ideology or creed. The story itself is broadly seen as providing hope for a better future. Success and prosperity, it is said, depend on it. In the end, it effectively dictates the direction of our lives.

It is an invention that stands alone. Few, if any, can match its reach.

Its greatest power, however, may lie in its virtual invisibility. Deeply internalized, the story behind the invention is discussed only on the margins of political debate. Indeed, questioning the logic of the invention one risks losing cultural sanction.

Few inventions have ever possessed more cultural authority. It comes as somewhat of a surprise that the invention is actually quite new, its current definition newer still. Or that almost no one knows where it came from—why it was developed, and for what purpose.

From a distance, one could capture the invention in three words: growth is good. The idea is so widely sanctioned that its premise is rarely discussed. It has become an article of faith: growth gives rise to progress and prosperity; lack of growth leads to depression and misery. People and governments across the globe believe in it, and do whatever they can to support it. National economies and world systems are organized around it. Our collective compass of success is calibrated by it. Growth, in the words of two skeptical economists, represents "the beckoning buoy toward which all humanity must sail."[1]

But if our standards of living depend on continued growth, how to make sense of the fact that many of us experience a loss of purpose and foresee declining prospects for our children as we push the planet to its limits? What does it mean, in short, when people from political left to right have deeply internalized faith in growth, yet the regime of growth not only fails to deliver on its promise, but also leads us down a path of mounting dangers?

My exploration of this question began in a classroom. A graduate student in my "History of Capitalism" course asked, "How do we measure success? How do we know we're on the right track?" It was an excellent question, but one that caught me off guard. As an economic historian, I was familiar with standard answers. I told her about economic performance indicators that generally drive decision-making, small and large. By far the most important is something called "Gross Domestic Product" (GDP). One little number with enormous power. In fact, most other economic measures directly derive from it; few aspects of our lives escape it. Yet I realized that this number, however big its impact, was not much of an answer for my student.

Trying to clarify, I later ran this by her: "Imagine a pill-dependent smoker who, on the way to his divorce lawyer, crashes his oversized car into a school bus because he is texting about an impending derivatives trade. Then suppose he survives, pays his many legal and medical bills, and continues to consume expensive gas, harmful cigarettes, and addictive pharmaceuticals. Contrary to common sense, he fits the profile of a modern economic hero—someone who purchases a lot of goods and requires a lot of services, including fossil fuel, gadgets, medical care, lawyers' fees, and financial advice." My point was this: according to standard accounting, his path, however reckless it may be, would significantly boost "economic growth." According to governing assumptions, it therefore increases our standard of living and contributes to our collective "well-being." After all, he has added more than his share to the GDP.

Surely, this example of excessive living was short of a complete answer. For one, it did not yet say anything about the structural imperatives that sponsor such conduct, or what purposes mindless growth might serve, why the logic that more is better remains strangely invisible, much less why we continue to follow the promise of endless growth despite growing awareness of its many flaws. Yet the story began to illuminate a central dilemma. Our measures frequently fail to reflect what we want.

What does GDP measure? In essence, the totality of goods and services produced.[2]

This led straight back to the initial question: Is GDP a good indicator for success? Is it really something we should pursue? Put differently: how did it happen that the compass we collectively follow is so narrow and in many cases actually points us in a direction opposite to what we, as citizens and family members, value and believe? Can this be explained in ways that make any sense?

Big questions to which I had no good answers. A few weeks earlier, I had watched a documentary on the consequences of climate change with my oldest son. Though rather technical, the dire predictions underlying the film's central message clearly caught this 14-year-old's attention. When it was over, he looked straight into my eyes and somberly inquired, "Dad, what're you going to do about this?" First tempted to reassure him with something like "it'll all be fine," I proceeded to tell him about recycling, buying a smaller car, and turning down the thermostat. Not very good answers either. My responses barely scratched the surface of the problem.

Perhaps a better way to think about it should have been obvious all along. The two questions—how to measure real success, and how to respond to bad measures, particularly when they dominate our lives and lead to tragic results—are intimately related. From Amsterdam to Beijing and Rio to Washington, economies and cultures have hitched their hopes and aspirations to growth. Success and well-being is largely defined by growth. Growth, in turn, is defined by GDP.[3] And GDP is a blind meter: it counts only output; it ignores costs and losses.

The logic is deceptively persuasive: more is better. Until we realize the measure never asks "more of what?" It's like saying, as business owners or teachers or parents, "we want more activity," without ever specifying what kind of activity.

But the failure goes beyond a lack of direction and purpose. The logic of GDP foresees no end to growth. Our collective performance can receive an A+ even if large numbers of people are out of work, a sense of community and purpose is disappearing, inequality is rising, resources are depleted, and nature is turned into parking lots. Endless growth on a finite planet simply does not add up.

Bad measures inevitably lead to bad results.[4]

Both my student and my son deserved a better answer. The basic questions remained. First and foremost, what is the purpose or objective of our economy? Has there ever been a deliberate and public conversation around this question? And once a goal can be identified, what indicators do we have for our success?

"An economy is a mode of social cooperation based on a system of rewards and incentives."[5] In today's economies, this essentially means we do what we get paid for. Modern economies rely on a complex system of rules that define markets and taxes and income to provide incentives and to determine rewards. In essence, they decide what we do and don't get paid for.

Our most important performance measure says nothing about whether quality of life is improving, or even if our activities are viable. It only tells us about how much stuff was produced, and how much money has exchanged hands.[6] As a result, cultures around the world promote, quite literally, blind and mindless growth—and increasingly dangerous growth. And they do so largely independent of what they subjectively want.

We can recognize this dynamic in our own lives. Measures like grades or degrees or income provide easy and convenient placeholders for a complex reality. They also represent a target that substitutes for the purpose of our actions. They tend to replace deliberation and reflection. A goal of acquiring more money, say, can effectively replace questions about meaning or consequence of what's needed to achieve it. Meaningful work may be the initial purpose. The measuring rod of income may be a very poor indicator; when the indicator becomes the goal, the purpose is effectively lost.

The target of GDP growth, of course, can be pursued in a variety of ways. Richer and more developed countries, for instance, can afford to pay more attention to things like family-leave, environmental protection, or alternative energy sources. Some political cultures may deliberately support family businesses while others reject, say, the use of nuclear energy. But no economy of scale has yet said "no" to the imperatives of GDP growth. Indeed, many political initiatives with broad popular support—from serious carbon emissions reductions to living wage campaigns—have faltered once they were perceived to threaten the preeminent goal of GDP growth. Despite all cultural differences, today's world pursues a common goal, tracked by a common measure.

And what we measure matters. Leading up to the French Revolution, peasants realized that, since landlords controlled the scales measuring the peasants' yields, peasants would not be assured a fair price. Landlords consistently fudged and cheated. Peasants routinely faced poverty and starvation. A central demand of the revolution thus became "one king, one law, one weight, one measure!" For their own good, they needed to know what got measured, and rely on *how* it got measured.

Clearly defining the units of measures did not quite solve the problem, however. Despite general agreement on units, sharecroppers in the American South could not trust plantation owners to measure crop yields fairly any more than citizens today can trust oil companies to calibrate their own gas pumps or meat producers to write and enforce meat safety regulations or athletes to self-monitor their drug tests. Simply put, clearly defined measures require transparent implementation and reliable enforcement.

Soviet workers discovered that if the rigid goals of the "five-year plan" determined success and rewards, people in charge of the books would simply resort to massive deception. In the end, no one knew in the Soviet Union how much was produced. Quality was abandoned and production crawled along with a staggering degree of inefficiency and waste.

Following bad metrics was not a problem unique to communism. At the very centers of high capitalism, the twenty-first century started out with financial speculators massively cooking the books with deceptive measures until they almost sank the entire world economy.

Bad measures can have devastating consequences.[7]

Choices about what to count, and how to count it, define many of our core values. In the case of an entire national economy, what we measure takes on additional significance, for it routinely defines what we think and do.[8] We thus need to know what we measure, and *why*.

Perhaps it's true to say without measures we would be adrift in a sea of unorganized thoughts and purposeless activity.[9] It is certainly true that with bad measures we fall captive to misguided activity following the illusion of organized thought.[10]

How does GDP stack up? As a measure of social well-being, GDP is akin to a personal calorie intake meter, tied to the notion that food is essential, ergo the more calories we consume, the better off we are. Hungry at first, we appreciate the focus on calories. Once sated, we soon find ourselves falling ill, overfed yet in the midst of a culture that keeps cajoling and pushing us toward more.[11]

This is not an indictment of all growth. Many kinds of growth are vital for an overall improvement in quality of life. But to GDP, which largely follows the logic of "converting nature into cash, and commons into commodities," quality is merely incidental.[12] This does not need to be so. There is nothing about growth that makes it inherently blind and indiscriminate. "Value is what we ascribe. Prosperity is what we make it to be."[13]

As I explore in detail in this book, GDP follows a deceptive logic.[14] It counts everything the economy produces, even if it leaves behind, in the words of an insightful early critic, "great furrows of wreckage."[15] It counts output without any distinction between the good and bad we put out.

Historically, there is little doubt that growth initially helped create unprecedented opportunities—for human expression, for learning, and for freedom itself. Yet the more central GDP has become, the more wreckage it has produced: depletion of resources, climate change, erosion of communities, social decay, rapid decline of biodiversity, a stark divide between haves and have-nots—and resulting endless conflict. Not surprisingly, the literature on the various shortcomings of GDP has ballooned in recent years.[16]

While this book builds on such critiques, its main objective is very different, something both bigger and more specific. It traces how and why a measure constructed in times of dire need, and with legitimate yet limited purpose, rose to global predominance. Why did cultures across the globe—

Americans, Europeans, even former communists in China and Russia—buy into this model and its logic, and do so lock, stock, and barrel? How did something constructed with the narrow purpose of *describing* a crisis subsequently turn into something *prescribing* what we do, effectively serving as a substitute for democratic deliberation and political ideals? How did a narrow tool turn into the measure of our lives? Above all, what happens to individuals and communities when they tie their hopes to the "bottom line?" In the end, how can we generate a much better set of tools that actually represent our collective aspirations?

Purpose, goals, indicators. What gets measured, how it gets measured, on which track we find ourselves—all are related; all define each other. In physics as in economics, the measures influence the outcomes.

This brings up another challenge. Deeply ingrained patterns of thinking tend to be hard to break. For several generations, economic growth (as defined by GDP) has been the dominant story, the logic of our culture. Most people alive today cannot remember a time when the performance of economies was not yet measured by GDP. It doesn't matter whether we call it our dominant paradigm, our hegemonic ideology, or our collective fishbowl. By representing both measure and goal, GDP defines what we do and why we do it. And who we are. Much like other familiar measures, "it is a language that is picked up automatically and spoken without conscious thought."[17] Yet unlike other familiar measures such as "yards to go" or "speed of sound," GDP defines not only a snapshot of a state but also implies a desirable direction.

It should give us pause when critics and defenders of capitalist economies alike have built their hopes and objectives on continued GDP growth. What are the underlying assumptions behind such global faith? What are its consequences?

It is simpler to perceive the crucial significance of measures in other's lives. We can grasp why peasants in Britain, for instance, used to measure land area not by size or prize, but by how many people it could sustain; or why some native Americans judged their actions not by wealth creation but by what impact it had on the seventh generation after them. Both confronted scarcity and survival on a very immediate level, in direct interaction with nature. Different times, different cultures: relatively easy to put under the microscope.

Ironically, the further removed from our own experiences, the better we tend to see.

Figuring out our own values and assumptions, on the other hand, is hard work. Trying to understand why we do what we do runs into many barriers, not least among them habit, fear, and self-interest. Sociologists are probably right when they say, "You have to step outside the line in order to see the line." As an American audience, for instance, try this experiment with an all-too-familiar social measure: imagine a culture without race. Sure, we can show that race did not always exist. We can trace its origins, analyze the reasons behind its invention, and explore its many manifestations over time. But can we envision life without it?

Much the same is true when it comes to the logic of GDP. As a human invention less than half as old as race, its tentacles are nevertheless deeply embedded in our thinking and doing. In critical areas of our lives, it is the air we breathe, represents the language we speak. National power is ranked by GDP. The state of the economy is determined by GDP. Corporations are evaluated by their contributions to GDP. The quality of education is judged by its role in growing GDP. The work (and only recently acquired prominence) of economists is tailored around GDP. Political fortunes depend on GDP. Progress itself, we are told, is a function of GDP. Not least of all, the development of cultures around the world from "tinkerers and producers" to societies of consumers, inhabiting a growing state of "disconnect from . . . modern existence," is a direct result of GDP growth.[18]

We tend to take it for granted and move on, continuing to follow the logic that well-being equals growth of GDP, blithely assuming that jobs and a decent standard of living for growing numbers of people depend on it. We need to know how all that happened, and why, because the course of the future depends on what economic signposts we follow. "He who holds the power to define is our master," reminds the cultural critic Neil Postman, but "he who holds in mind an alternative definition can never quite be his slave."[19]

Deeply ingrained thinking comes with authority—and dangers. As Easter Islanders realized some five hundred years ago, too late, cutting trees in the pursuit of earthly wealth and spiritual salvation was fraught with peril.

Running into inevitable lumber shortages on their confined plot of land, they heightened their resolve to fell trees.[20] Eventually left on a barren island bereft of lumber for their fishing boats or firewood for their stoves, the remaining islanders died from cannibalism and starvation.[21]

Rather than trust our presumed superiority to the Easter Islanders, it is my hope that, instead, we collectively start a serious conversation about what path we want to follow. What outcomes do we desire? And what measures can actually tell us whether we're moving toward those outcomes?

CASTING A SPELL

Before a conversation about goals can turn into a practical effort, however, we need to grapple with how it is possible that cultures and peoples around the world fell under the spell of a little opaque number? Why do they subscribe to far-reaching assumptions that cannot withstand basic tests of logic and experience? Here, we need to take a brief journey into the past—a past preceding the prevailing acceptance of a narrow worldview; a not-so-distant past in which GDP did not yet exist.

As well-worn truism has it, momentous events can change the course of history. In the United States, most people's thinking about what is normal and right, for instance, was likely altered in the aftermath of the bombing of Pearl Harbor or the attacks of 9/11.[22] Collective frames of reference moved. Values shifted. The course of history changed. How to evaluate success and failure transformed with it.

But then there are seismic developments that never appear on anyone's collective radar screen. Few are aware anything happened, much less realize how important it was. Consequently, we don't recognize any shift, even if something has effectively put our lives on a different track.

This book is about one such development. The story has multiple woven strands, but it is fitting to begin with a brief account of one man behind the creation. Parts of this story have been told before, but crucial elements have remained unexplored.

In the 1930s, the nation found itself in the midst of the deepest economic downturn of its history. Millions lost their jobs. Investments seemed to stall. Breadlines grew as long as despair grew deep. Yet no one in America possessed any reliable information on productivity, on income, on employment. The 261-page report that now lay in front of the meticulous scholar was, he knew, an astonishing accomplishment. He had labored, sometimes day and night, to put together basic tables on "national income"—or what he briefly defined as "that part of the economy's end product that results from the efforts of the individuals who comprise a nation."[23] On a shoestring budget, he and a small staff of six assistants had struggled to respond to a U.S. Senate request to provide basic and up-to-date information on the entire national economy.

Simon Kuznets officially submitted his report Thursday morning, 4 January 1934. As an economist and statistician wary of economic theories unmoored from solid data, Kuznets had been engaged in studies of national income ever since he joined the National Bureau of Economic Research (NBER) in 1929.[24]

Later scholars would argue the time was ripe for Kuznets's game-changing work.[25] Since national economies had reached unprecedented dimensions by the late 1920s, they generated unparalleled calamities when they ran into crises. The Great Depression was such a blow—deep, wide, international. Yet governments could intervene and provide a helping hand only if they had reliable economic data, if they knew on a national level what was going on with basic things like income and investment, with productivity and employment. Kuznets's Senate report provided such data for the first time.

In hindsight it is not too much to say that his work contributed to liberating the United States from the tyranny of economic ignorance.[26]

Kuznets, a Russian Jew, was born in 1901. His family was forced out of the country five years after the Bolsheviks took power in October 1917. Though personally familiar with revolution and upheaval, he did not anticipate the consequences of his own work.

His "national income" first provided the necessary foundation to implement and assess New Deal policies intended to lift America's economy out of the Depression. It subsequently supplied data essential to jumpstart military production, proving critical to American victory (as well as British and Soviet survival) in World War II. Then, in the changed post-1945 world, it resulted in a greatly expanded role of government in market economies around the world.

After the war, the "national income and product" calculation became known as Gross National Product, or GNP, a quarterly figure that quickly became shorthand for economic success in capitalist countries.[27] Since then, GDP accounts have provided the essential groundwork for policy tools that have led to unparalleled periods of economic growth and a remarkable reduction in the length, frequency, and duration of economic downturns in post–World War II capitalist economies.[28]

What's the difference between "GDP" and "GNP"? In essence, GDP is a measure of production within a country's borders (including by foreigners), whereas GNP measures production by a country's nationals (including those working in other countries). In short: goods produced in, say, a GM factory in Mexico would be included in U.S. accounts if we followed the GNP model, but would be part of Mexico's accounts if we followed the GDP model. In most industrialized countries the difference between the two is very small (though in some developing countries it can be as much as 50 percent). Since both GDP and GNP display the same characteristics discussed here, they can be used interchangeably for the purposes of this exploration.

By the early 1950s, GDP had become the coin of the realm for international trade and finance among all nations outside the Soviet and Chinese orbits. To get loans or trade with others, the world's nations had to implement GDP accounting processes.[29] For noncommunist nation-states, financial transactions and economic policy decisions were subsequently defined by the rules informing GDP. Following the 1978 economic reform policies in China, and the 1991 collapse of the Soviet Union, national income and product accounts virtually identical to the U.S. / UN template conquered the rest of the globe.

There is a GDP equivalent in every country.[30] In Germany it is *BIP (Bruttoinlandsprodukt*), and in France *PIB (Produit Intérieur Brut*). With virtually identical names in their respective languages, China has one, Russia has one, Brazil has one. All measure the same things, promote the same choices, and allow for simple comparisons across time and national boundaries. Because of its prominence, GDP has been celebrated as the most important and useful economic invention of the twentieth century.[31]

Some eighty years after its invention, it is hard to imagine a time in which national economies were not measured by GDP. Today, the tyranny of ignorance that characterized modern economies into the 1930s and helped bring about the Great Depression has been replaced by another kind of tyranny, that of a single metric.[32]

In fairness, dissenting voices existed from the beginning. A few have decried the GDP regime as promoting an economy where humans "steal from the future, sell it in the present, and call the process 'growth.' " A tiny minority goes as far as calling the GDP concept "primitive in the extreme and certainly useless for any adequate expression of growth."[33]

While the chorus of critics has grown over time, policymakers across the world and across the political spectrum still stand virtually unanimous: the most pressing task is robust GDP growth.

It begs the question: what's behind the official definition of "totality of goods and services produced?"[34] At first glance, it seems sheer common sense—GDP attempts to count the economic contributions of people, as well as the income they make from their contributions. Simple enough. Hidden below the overall intention, however, lurk choices and decisions invisible in our day-to-day lives. What are goods and services? How are they defined? Whose contributions count? What, in the end, are we growing?

Definitions are based on a still-evolving, cumbersome system of criteria. What is counted as investment or income or expenditure, and how to define the difference between "final" and "intermediate" consumption follows a logic that often eludes even accountants.[35]

To use economic growth as the barometer of success is a historically novel idea. To use GDP as the ultimate measure of economic performance is of even more recent vintage. This book explores the fundamental shift in thinking and the revolution in social relations that made GDP possible and, in turn, were later sanctified by GDP accounts. Values that had developed over thousands of years in many different cultural contexts were largely abandoned within a generation. In a process that started with industrialization and came to full fruition after World War II, value itself came to be defined in ways that challenged core global traditions, from the nature of work to the meaning of human existence.

Quality of life itself, or what the American tradition more precisely frames as the quality of *life, liberty, and the pursuit of happiness,* has no defined space in the pursuit of growth—it is not recognized as a category in our national and international economic ledgers. As such, our economic goals are fundamentally out of sync with our political and cultural achievements.[36]

EXPLORING A PATH

It ain't what you don't know that gets you into trouble.
It's what you know for sure that just ain't so.
—*Mark Twain*

Stepping out of the darkness cast by mysterious GDP rules it becomes possible to shed light on the underlying question: what are smart economic goals? It is a question, it turns out, that lies buried beneath layers of bad history, misleading measures, and deeply ingrained yet faulty cultural assumptions.

In every century there are sorcerers—clever individuals or groups who seem to hold magical powers of explanation and foresight that can be used for good or evil. Since the Great Depression, this mantle has often been worn by economists.[37] Many marvel at their arcane skills and seemingly predictive powers over chaotic forces, while others jeer and recoil at their alchemy and its debatable results. This book is the story of their most consequential creation: put together by well-intentioned practitioners, GDP has mutated from useful *descriptive* tool to *prescriptive* be-all and end-all, a collective goal at once momentous and nearly invisible.

The chapters that follow describe in some detail how GDP accounting informed responses to the Great Depression; helped win World War II; determined the amount and focus of Marshall Plan Aid to war-torn countries in Europe; helped decide the size of military budgets during the Cold War (and continues to be used as a measure for what is deemed necessary military expenditures);[38] unleashed a torrent of financial bail-out and stimulus packages and the printing of money (what the Federal Reserve calls "quantitative easing") during the Great Recession; and, in the end, has come to define the aspirations of every mainstream political ideology in the world, defining the lives of businesses, consumers, and politicians alike.

Yet the 2007–9 Great Recession revealed once again the stark limits of economists' powers and the bankruptcy of GDP as prescriptive tool.[39] Behind the activities promoting GDP growth, a profound crisis of purpose and direction flared. People began to realize that we had no indicators reliably tracing the nature of our predicament. Above all, the data that informed political interventions failed to portray the crisis in terms that adequately reflect the human experiences of regular citizens—not just in terms of jobs and housing or education, but also in terms of purpose, community, and dignity. The bottom line: What matters to people's lives matters less and less to the official accounts of the economy under GDP rule.[40]

The crisis shook the foundation of the larger system. Even strident defenders of the presumed underlying rationale of markets, like former Chairman of the U.S. Federal Reserve Board, Alan Greenspan, were forced to admit "a flaw in the model . . . that defines how the world works."[41]

But it is more than a flaw. Following the GDP logic is a self-inflicted problem. It is not a reflection of human nature or an inevitable result of the profit motive, nor is it necessary to run modern economies. Instead, its particular logic is directly traceable to a series of responses to 1930s disaster and war. The problem is that policymakers are using a 1930s tool for twenty-first century problems.

Around the globe, the primary purpose of governments today boils down to the need to avoid recessions (as exclusively measured by GDP). Trapped in this logic, governments rack up debt, manipulate markets, ignore rising inequality and social discontent, and turn into progenitors of various versions of disaster capitalism. They do so based on the faith that what matters above all is GDP growth. The consequences are at once curious and frightening. Former Secretary of the Treasury Tim Geithner, for instance, explained his coddling of big capital after the financial meltdown of 2008 thus: when growth rates are at risk "we have to do the opposite of what seems intuitive and fair." To which his interviewer replied, "You're essentially rationalizing an extortion scheme." It is the logic of the age of GDP.[42]

The story told in these pages will start with an exploration of how we got to this point. To evaluate the uniqueness of GDP as a historical phenomenon, chapter 1 explores the historical roots of evaluating economic success with such narrow focus, and, in chapter 2, traces the emergence of growth defined in monetary terms as the primary goal of economic activity. The journey will take us to the origin of GDP creation, the focus of chapter 3. It was in the midst of the Great Depression that policymakers, desperate for tools that would allow them to slow down the runaway train of economic disaster, asked for what eventually became "GDP."

Chapter 4 picks up the story after the initial creation of national accounts—what they looked like and how they were used. It is not until the Depression was supplanted by the dire needs of World War II that the first version of GDP was fully developed. Here the forerunner of today's GDP proved its worth, becoming central to the American and Allied victory. This is the story of chapter 5.

After World War II, with depression and crisis once again threatening, GDP became the yardstick for success even during times of peace. Chapter 6 traces the process by which GDP first became the leading economic indicator in the United States and Great Britain, then in astonishingly quick succession all capitalist nations, and finally all major economies around the world.

What is the world's leading measure of success? Chapter 7 explores in detail what GDP represents today—how it is defined, how it is used, and what exactly it measures. Chapter 8 shows the impact of GDP on our political and economic lives, and summarizes the work of many of its critics. Chapter 9 investigates the results of living under the spell of GDP. The crises and opportunities this presents for the future are surveyed in Chapter 10. Finally, chapter 11 explores a series of possible alternatives. The outline is informed by the criticism that the "father of GDP," Simon Kuznets, leveled against the eventual outcome of his own labors.

Books, not unlike fields of study, have traditionally been separated into genres and disciplines. They sprout their own languages, associations, and ways of doing things, including the need for clear demarcations within and between fields and disciplines. This never made much sense to me. It undermines the promise of full inquiry and violates the spirit of good science. A great deal of exceptional work—from Karl Polanyi's masterpiece on historical transformations to Rachel Carson's wakeup call about unintentional environmental impact or Thomas Piketty's recent opus on inequality—is done by thinkers who started with a problem or question, and then proceeded to learn and synthesize from whatever fields or disciplines pertinent to the subject at hand.[43]

I make no such expansive claims. But this book is the result of a deliberate attempt to be two things not usually found between the same two covers: sound original history and a call to action. Since the topic inevitably touches on some of the big questions of history, including humanity's ability to govern itself consciously, my attempt was to bridge a wide range of audiences. The narrative includes historical explorations based on original research as well as personal anecdotes, illuminating metaphors, and a good dose of clarifying analytical reflections.

I've spent seven years exploring how and why the modern world ended up following economic goals both largely invisible and by now dangerously anachronistic. What could be learned from the past to steer us toward a more deliberate, more democratic, and, above all, more sustainable course? By necessity, this drew me beyond historical thinking to investigations into economics, sociology, philosophy, anthropology, public policy, and environmental studies. Specialists in each field will undoubtedly feel that their discipline has not received appropriate coverage.[44]

Given the sheer scale of the question, there are also a lot of things this book is not. While I provide an informed overview of international developments, my detailed exploration is based on the countries where GDP originated. I hope scholars who follow might tackle detailed explorations of how the GDP logic spread into other societies such as India or China, as well as tease out diverse cultural responses to the same logic. There are significant differences between, say, Denmark, Japan, Nigeria, and the United States, yet all operate within the same GDP paradigm.

Poor countries in particular have suffered greatly under policies requiring austerity in order to create a stable environment for GDP growth. This was not a focus of this book, but represents an important field of research. There is also a related need for detailed studies tracing the correlation between the success/failure of particular policies and their perceived impact on GDP. Politics around the world has become a handmaiden to the imperatives of GDP. In the case of the United States, to my knowledge no single large-scale policy initiative since World War II—however meritorious—succeeded if it threatened GDP growth.

In the end, my goal was not to provide pat answers, but to explore paths and intersections necessary for a viable roadmap toward responses and initiatives that will, by necessity, continue to evolve. And such a map can be useful only if based on a clear understanding of decisions made in the past. How and why did we end up at this particular point?

Debate must continue. But the distance between reality and what humanity is able to accomplish, here and now, is wider, it seems to me, than it has ever been before. The most formidable obstacles toward a smarter future are likely not any of the rationalizations routinely marshaled to excuse inaction or laziness of thought—other people; political parties; government; entrenched power; narrow cultures; human nature. The greatest obstacle might well be lack of imagination—or, more precisely, historically informed imagination. I invite the reader to follow the explorations of traps we've created for ourselves historically—both structural and ideological—and then, no doubt, to quarrel or disagree with some conclusions drawn. Above all, however, I would like to promote a much more expansive conversation about possibilities.

Both our natural and our social environment provide mounting evidence that we are witnessing the inevitable end of the GDP growth era. By choice or by force, we soon will embark on another pivotal transformation in history. The confusion between promise and reality has become untenable; increasingly, throughout modern societies, people are becoming disenchanted, yearning for new guideposts that actually reflect values that affirm life and smart development. Yet a focus on the here and now obscures choices and opportunities we have. It ignores the treasure chest of available historical insights and is blind to openings the future inevitably provides. Above all, the quality of the new course we are going to chart will greatly depend on our ability to articulate better goals and design more deliberate performance measures. For that to happen we must first find out how we got to this place.

Throughout we can follow Simon Kuznets and ask, "What are we growing? And why?"[45]