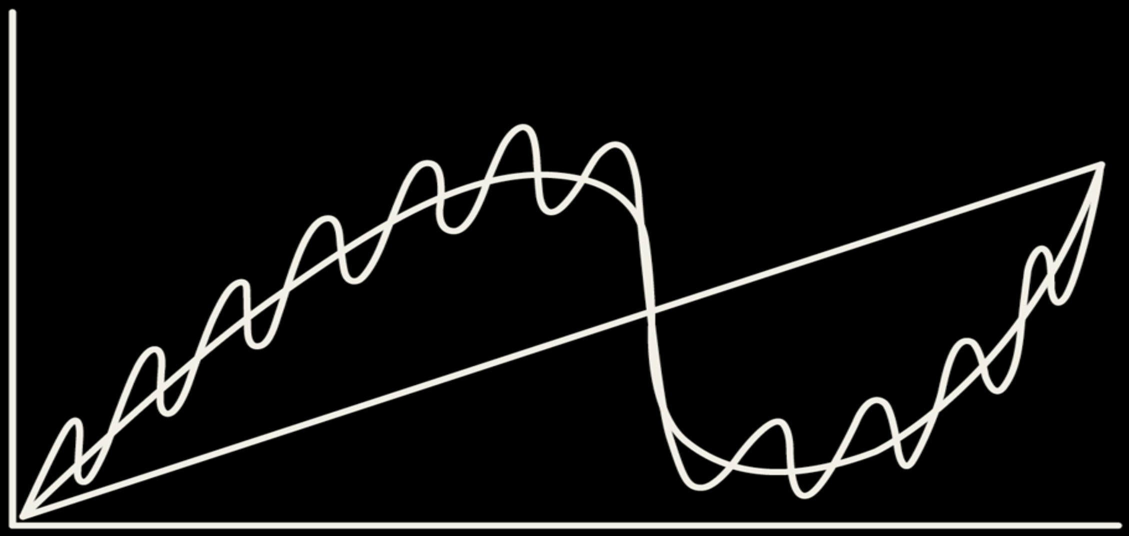
Principles for Dealing with

THE CHANGING WORLD ORDER



Why Nations Succeed and Fail

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To my grandchildren and those of their generation who will be participants in the continuation of this story: may the Force of Evolution be with you.

WITH APPRECIATION

To all who helped me learn, you each have my deep gratitude for giving me valuable bits and pieces that I could put together to make this book. If it wasn't for the conversations we had, the thoughts you shared in your writings, and the histories and statistics that you dug out from archives, this book would have not been possible. In some cases you are still with us and in some cases you are not, but you are all in my thoughts. I am especially grateful to Henry Kissinger, Wang Qishan, Graham Allison, Lee Kuan Yew, Liu He, Paul Volcker, Mario Draghi, Paul Kennedy, Richard N. Haass, Kevin Rudd, Steven Kryger, Bill Longfield, Neil Hannan, H. R. McMaster, Jiaming Zhu, Larry Summers, Niall Ferguson, Tom Friedman, Heng Swee Keat, George Yeo, Ian Bremmer, and Zhiwu Chen.

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HOW TO READ THIS BOOK

- In writing this book I wrestled with whether to make it complete or concise and decided to try to make it both by bolding passages to create a quick-read version. **If you want to read the concise version, read what is in bold, and if you want more, it's all available to you.**
- I also wanted to convey some principles that are timeless and universal truths for dealing with reality well, which I denoted by ● ***putting a red dot in front of them and italicizing***.
- For some subjects, I had embellishments that I thought would be interesting to some but not all readers, so I chose to present them as an addendum to the respective chapter. Feel free to read or skip as you like.
- At the back of this book, you can find a glossary that explains the abbreviations you see in some of the charts.
- Finally, to keep this book from becoming much too long, there is also a lot of supplemental material available at economicprinciples.org, including reference material, citations, more data on the indices, etc.

INTRODUCTION

The times ahead will be radically different from those we've experienced in our lifetimes, though similar to many times in history.

How do I know that? Because they always have been.

Over the last 50 or so years, in order to handle my responsibilities well, I have needed to understand the most important factors that go into making countries and their markets succeed and fail. I learned that to anticipate and handle situations that I had never faced before I needed to study as many analogous historical cases as possible to understand the mechanics of how they transpired. That gave me principles for dealing with them well.

A few years ago, I observed the emergence of a number of big developments that hadn't happened before in my lifetime but had occurred numerous times in history. Most importantly, I was seeing the confluence of huge debts and zero or near-zero interest rates that led to massive printing of money in the world's three major reserve currencies; big political and social conflicts within countries, especially the US, due to the largest wealth, political, and values gaps in roughly a century; and the rising of a new world power (China) to challenge the existing world power (the US) and the existing world order. The most recent analogous time was the period from 1930 to 1945. This was very concerning to me.

I knew that I couldn't really understand what was happening and deal with what would be coming at me unless I studied past analogous periods, which led to this study of the rises and declines of empires, their reserve currencies, and their markets. In other words, to develop an understanding of what is happening now and might happen over the next few years, I needed to study the mechanics behind similar cases in

history—e.g., the 1930–45 period, the rise and fall of the Dutch and British empires, the rise and fall of Chinese dynasties, and others.[1] I was in the midst of doing those studies when the COVID-19 pandemic struck, which was another one of those big events that never happened in my lifetime but had happened many times before. Past pandemics became a part of this study and showed me that surprising acts of nature—e.g., diseases, famines, and floods—need to be considered as possibilities because those surprising big acts of nature that rarely come along were by any measure even more impactful than the biggest depressions and wars.

As I studied history, I saw that it typically transpires via relatively well-defined life cycles, **like those of organisms, that evolve as each generation transitions to the next.** In fact, the history and the future of humanity can be seen as just the aggregate of all the individual life stories evolving through time. I saw these stories flow together as one all-encompassing story from the beginning of recorded history up to this moment, with the same things happening over and over again for basically the same reasons, while still evolving. **By seeing many interlinking cases evolve together, I could see the patterns and cause/effect relationships that govern them and could imagine the future based on what I learned. These events happened many times throughout history and were parts of a cycle of rises and declines of empires and most aspects of empires**—e.g., of their education levels, their levels of productivity, their levels of trade with other countries, their militaries, their currencies and other markets, etc.

Each of these aspects or powers transpired in cycles, and they were all interrelated. For example, nations' levels of education affected their levels of productivity, which affected their levels of trade with other countries, which affected the levels of military strength required to protect trade routes, which together affected their currencies and other markets, which affected many other things. Their movements together made up the economic and political cycles that occurred over many years—e.g., a very successful empire or dynasty could have its cycle last 200 or 300 years. **All the empires and dynasties I studied rose and declined in a classic Big Cycle that has clear markers that allow us to see where we are in it.**

This Big Cycle produces swings between 1) peaceful and prosperous periods of great creativity and productivity that raise living standards a lot and 2) depression, revolution, and war periods when there is a lot of fighting over wealth and power and a lot of destruction of wealth, life, and other things we cherish. I saw that the peaceful/creative periods lasted much longer than the depression/revolution/war periods, typically by a ratio of about 5:1, so one could say that the depression/revolution/war periods were transition periods between the normally peaceful/creative periods.

While the peaceful/creative periods are certainly more enjoyable for most people, all these realities have their purposes for advancing evolution, so in the broader sense they are neither good nor bad. The depression/revolution/war periods produce a lot of destruction, but like cleansing storms, they also get rid of weaknesses and excesses (such as too much debt) and produce a new beginning in the form of a return to fundamentals on a sounder footing (albeit painfully). After the conflict is resolved, it is clear who has what power, and because most people desperately want peace, there is a resolution that produces new monetary, economic, and political systems—together, a new world order—and fosters the next peaceful/creative period. Within this Big Cycle are other cycles. For example, there are long-term debt cycles that last about 100 years and short-term debt cycles that last about eight years. This short-term cycle also has within it longer, prosperous expansion periods that are interrupted by shorter recession periods, and within these cycles are shorter cycles, and so on.

Before I get your head spinning with all this cycle stuff, the main thing I want to convey is that when the cycles align, the tectonic plates of history shift, and the lives of all people change in big ways. These shifts will sometimes be terrible and sometimes terrific. They certainly will happen in the future, and most people will fail to anticipate them. In other words, • ***the swinging of conditions from one extreme to another in a cycle is the norm, not the exception.*** It was a very rare country in a very rare century that didn't have at least one boom/harmonious/prosperous period and one depression/civil war/revolution period, so we should expect both. Yet, most people throughout history have thought (and still think today) that the future will look like a slightly modified version of the recent past. That is because • ***the really big boom***

periods and the really big bust periods, like many things, come along about once in a lifetime and so they are surprising unless one has studied the patterns of history over many generations. Because the swings between great and terrible times tend to be far apart ***the future we encounter is likely to be very different from what most people expect.***

For example, my dad and most of his peers who went through the Great Depression and World War II never imagined the post-war economic boom because it was more different from than similar to what they had experienced. I understand why, given those experiences, they wouldn't think of borrowing and putting their hard-earned savings into the stock market, so it's understandable that they missed out on profiting from the boom. Similarly, I understand why, decades later, those who only experienced debt-financed booms and never experienced depression and war would borrow a lot in order to speculate and would consider depression and war implausible. The same is true with money: money used to be "hard" (i.e., linked to gold) after World War II until governments made money "soft" (i.e., fiat) to accommodate borrowing and prevent entities from going broke in the 1970s. As a result, most people at the moment of my writing this book believe that they should borrow more, even though borrowing and debt-financed booms have historically led to depressions and internal and external conflicts.

Understanding history in this way also raises questions whose answers provide us with valuable clues on what the future will be like. For example, throughout my life, the dollar has been the world's reserve currency, monetary policy has been an effective tool for stimulating economies, and democracy and capitalism have been widely regarded as the superior political and economic systems. Anyone who studies history can see that ***no system of government, no economic system, no currency, and no empire lasts forever, yet almost everyone is surprised and ruined when they fail***. Naturally I asked myself how would I and the people I care about know when we are entering one of these depression/revolution/war periods and how would we know how to navigate them well. Because my professional responsibility is to preserve wealth regardless of the environment, I needed to develop an understanding and strategy that would have worked throughout history, including through these sorts of devastating times.

The purpose of this book is to pass along what I learned that has helped me and that I believe might help you. I present it for your consideration.

HOW I LEARNED TO ANTICIPATE THE FUTURE BY STUDYING THE PAST

While it might seem odd that an investment manager who is required to make investment decisions on short time frames would pay so much attention to long-term history, through my experiences I have learned that I need this perspective. My approach isn't an academic one created for scholarly purposes; it is a very practical one that I follow in order to do my job well. The game I play requires me to understand what is likely to happen to economies better than the competition does, so I have spent roughly 50 years closely observing most major economies and their markets—as well as their political conditions, since those affect both—trying to understand what is happening well enough to bet on it. From my years of wrestling with the markets and trying to come up with principles for doing it well, I've learned that • ***one's ability to anticipate and deal well with the future depends on one's understanding of the cause/effect relationships that make things change, and one's ability to understand these cause/effect relationships comes from studying how they have changed in the past***.

I arrived at this approach after the painful learning that the biggest mistakes in my career came from missing big market moves that hadn't happened in my lifetime but had happened many times before. The first of these big surprises for me came in 1971 when I was 22 years old and clerking on the floor of the New York Stock Exchange as a summer job. I loved it because it was a fast-pasted game of making and losing money played on a trading floor with people who liked to have a blast with each other—so much so that traders used to have water pistol fights right on the trading floor. I was engrossed in this game of watching the big developments in the world and betting on how they would drive the markets. Sometimes it could be dramatic.

On a Sunday night—August 15, 1971—President Richard Nixon announced that the US would renege on its promise to allow paper dollars to be turned in for gold. As I listened to Nixon speak, I realized that the US government had defaulted on a promise and that money as we knew it had ceased to exist. That couldn't be good, I thought. So on Monday morning I walked onto the floor of the exchange expecting pandemonium as stocks took a dive. There was pandemonium all right, but not the sort I expected. Instead of falling, the stock market jumped about 4 percent as the dollar plummeted. I was shocked. That's because I hadn't experienced a currency devaluation before. In the days that followed, I dug into history and saw that there were many cases of currency devaluations that had had similar effects on stock markets. By studying further, I figured out why, and I learned something valuable that would help me many times in my future. It took a few more of those painful surprises to beat the realization into my head that I needed to understand all the big economic and market moves that had happened in the last 100-plus years and in all major countries.

In other words, if some big and important event had happened in the past (like the Great Depression), I couldn't say for sure that it wouldn't happen to me, so I had to figure out how it worked and be prepared to deal with it. Through my research I saw that there were many cases of the same types of things happening (e.g., depressions) and that by studying them just like a doctor studies many cases of a particular type of disease, I could gain a deeper understanding of how they work. I studied these qualitatively and quantitatively through my experiences, by speaking with preeminent experts, reading great books, and digging into statistics and archives with my great research team.

From that learning came a visualization of an archetypical sequence of how rises and declines in wealth and power typically happen. The archetype helps me see the cause/effect relationships that drive how these cases typically progress. With that archetypical template specified, I can study deviations from it to try to explain them. Then I put these mental models into algorithms both to monitor conditions relative to my archetypes and to help me make decisions based on them. This process helps me refine my understanding of the cause/effect relationships to the point where I can create decision-making rules—i.e., principles for dealing with my realities—in the form of "if/then" statements—i.e., if X happens, then make Y bet. Then I watch actual events transpire relative to that template and what we are expecting. I do these things in a very systematic way with my partners at Bridgewater Associates. If events are on track, we continue to bet on what typically comes next; if events start to deviate from our template, we try to understand why and course correct. This process has helped me both understand the big cause/effect sequences that typically drive their progressions and gain a lot of humility. I do this continuously and will continue to do it until I die, so what you are reading is a work in progress.[2]

THIS APPROACH AFFECTS HOW I SEE EVERYTHING

Seeing events in this way helped shift my perspective from being caught in the blizzard of things coming at me to stepping above them to see their patterns through time.[3] The more related things I could understand in this way, the more I could see how they influence each other—e.g., how the economic cycle works with the political one—and how they interact over longer periods of time.

I believe that the reason people typically miss the big moments of evolution coming at them in life is because they experience only tiny pieces of what's happening. We are like ants preoccupied with our jobs of carrying crumbs in our very brief lifetimes instead of having a broader perspective of the big-picture patterns and cycles, the important interrelated things driving them, where we are within the cycles, and what's likely to transpire. From gaining this perspective, I've come to believe that throughout history there are only a limited number of personality types[4] going down a limited number of paths, which lead them to encounter a limited number of situations to produce a limited number of stories that repeat over time. The only things that change are the clothes the characters are wearing, the languages they are speaking, and the technologies they're using.

THIS STUDY AND HOW I CAME TO DO IT

One study led to another, which led me to do this study. More specifically:

- **Studying money and credit cycles throughout history made me aware of the long-term debt and capital markets cycle (which typically lasts about 50 to 100 years), which has led me to view what is happening now in a very different way than if I hadn't gained that perspective.** For example, interest rates hit 0 percent and central banks printed money and bought financial assets in response to the 2008 financial crisis. I had studied that happening in the 1930s, which helped me see how and why central bank actions of creating a lot of money and credit/debt 90 years ago pushed financial asset prices up, which widened the wealth gap and led to an era of populism and conflict. We are now seeing the same forces at play in the post-2008 period.
- In 2014, I wanted to forecast economic growth rates in a number of countries because they were relevant to our investment decisions. I used the same approach of studying many cases to find the drivers of growth and come up with timeless and universal indicators for anticipating countries' growth rates over 10-year periods. Through this process, I developed a deeper understanding of why some countries did well and others did poorly. I combined these indicators into gauges and equations that we used (and continue to use) to produce 10-year growth estimates across the 20 largest economies. Besides being helpful to us, I saw that this study could help economic policy makers because, by seeing these timeless and universal cause/effect relationships, they could know that if they changed X, it would have Y effect in the future. I also saw how these 10-year leading economic indicators (such as the quality of education and the level of indebtedness) were worsening for the US relative to big emerging countries such as China and India. This study is called "Productivity and Structural Reform: Why Countries Succeed and Fail, and What Should Be Done So Failing Countries Succeed." (This study, and every other study mentioned here, is available for free at economicprinciples.org.)
- Soon after the Trump election in 2016 and with increases in populism in developed countries becoming more apparent, I began a study called "Populism: The Phenomenon." That highlighted for me how gaps in wealth and values led to deep social and political conflicts in the 1930s

that are similar to those that exist now. It also showed me how and why populists of the left and populists of the right are more nationalistic, militaristic, protectionist, and confrontational—and what such approaches led to. I saw how powerful the conflict between the economic/political left and right could become and the significant impact this conflict has on economies, markets, wealth, and power, which gave me a better understanding of events that were and still are transpiring.

- From doing these studies, and from observing numerous things that were happening around me, I saw that America was experiencing very large gaps in people's economic conditions, which were obscured by looking only at economic averages. So I divided the economy into quintiles, looking at the top 20 percent of income earners, the next 20 percent, and so on down to the bottom 20 percent, and examined the conditions of these populations individually. This resulted in two studies. In "Our Biggest Economic, Social, and Political Issue: The Two Economies—The Top 40% and the Bottom 60%," I saw the dramatic differences in conditions between the "haves" and the "have-nots," which helped me understand the greater polarity and populism I saw emerging. Those findings, as well as the close contact my wife and I were having through her philanthropic work with the reality of wealth and opportunity gaps in Connecticut communities and their schools, led to the research that became my study called "Why and How Capitalism Needs to Be Reformed."
- At the same time, through my many years of international dealings in and research on other countries, I saw huge global economic and geopolitical shifts taking place, especially in China. **I have been going to China for 37 years and am lucky enough to have become well-acquainted with the thinking of top economic policy makers and a broad range of others. Having this direct contact has helped me see up close the reasoning behind their actions, which have produced remarkable advances.** It is a fact that these people have led China to become an effective competitor with the US in production, trade, technology,

geopolitics, and world capital markets, so how they've done this must be examined and understood without bias.

My most recent study, on which this book is based, came about because of my need to understand three big forces that hadn't happened before in my lifetime and the questions they prompt:

1. **The Long-Term Debt and Capital Markets Cycle: At no point in our lifetimes have interest rates been so low or negative on so much debt as they are as of this writing. The value of money and debt assets is being called into question by the supply-and-demand picture for them. In 2021, more than $16 trillion of debt was at negative interest rates and an unusually large amount of additional new debt will soon need to be sold to finance deficits.** This is happening at the same time as huge pension and healthcare obligations loom large on the horizon. These circumstances raised some interesting questions for me. Naturally I wondered why anyone would want to hold debt yielding a negative interest rate and how much lower interest rates could be pushed. I also wondered what will happen to economies and markets when they can't be pushed lower and how central banks could be stimulative when the next downturn inevitably comes. Would central banks print a lot more currency, causing its value to go down? What would happen if the currency that the debt is denominated in goes down while interest rates are so low? These questions in turn led me to ask what central banks would do if investors flee debt denominated in the world's major reserve currencies (i.e., the dollar, the euro, and the yen), which would be expected if the money that they are being paid back in is both depreciating in value and paying interest rates that are so low.

   A reserve currency is a currency that is accepted around the world for transactions and savings. The country that gets to print the world's primary currency (now the US, but as we'll see this has changed through history) is in a very powerful position, and debt that is denominated in the world's reserve currency (i.e., US dollar-

denominated debt now) is the most fundamental building block for the world's capital markets and the world's economies. It is also the case that all reserve currencies in the past have ceased to be reserve currencies, often coming to traumatic ends for the countries that enjoyed this special power. So I also began to wonder whether, when, and why the dollar will decline as the world's leading reserve currency, what might replace it, and how that would change the world as we know it.

2. **The Internal Order and Disorder Cycle: Wealth, values, and political gaps are now larger than at any other point during my lifetime.** By studying the 1930s and other prior eras when polarization was also high, I learned that which side wins out (i.e., left or right) will have very big impacts on economies and markets. So naturally I wondered what today's gaps will lead to. My examinations of history have taught me that ***when wealth and values gaps are large and there is an economic downturn, it is likely that there will be a lot of conflict about how to divide the pie.*** How will people and policy makers interact with each other when the next economic downturn arrives? I was especially concerned because of the limitations on central banks' abilities to cut interest rates adequately to stimulate the economy. In addition to these traditional tools being ineffective, printing money and buying financial assets (now called "quantitative easing") also widens the wealth gap because buying financial assets pushes up their prices, which benefits the wealthy who hold more financial assets than the poor do. How would that play out in the future?
3. **The External Order and Disorder Cycle: For the first time in my life, the United States is encountering a true rival power. (The Soviet Union was only a military rival, never a significant economic one.) China has become a rival power to the United States in most ways and is becoming strong in** most ways at a faster rate. If trends continue, China will be stronger than the United States in the most important ways that an empire becomes dominant. Or at the very least, it will be a worthy competitor. I have seen both countries up close for most of my life, and I now see how conflict is increasing fast, especially in the areas of trade, technology, geopolitics, capital, and

> economic/political/social ideologies. I can't help but wonder how these conflicts, and the changes in the world order that will result from them, will transpire in the years ahead and what effects that will have on us all.

To gain the perspective I needed about these factors and what their confluence might mean, I looked at the rises and declines of all the major empires and their currencies over the last 500 years, focusing most closely on the three biggest ones: the US Empire and the US dollar, which are most important now; the British Empire and the British pound, which were most important before that; and the Dutch Empire and the Dutch guilder before that. I also focused less closely on the six other significant, though less financially dominant, empires of Germany, France, Russia, Japan, China, and India. Of those six, I gave China the most attention and looked at its history back to the year 600 because 1) China was so important throughout history, 2) it's so important now and will likely be even more important in the future, and 3) it provides many cases to look at of dynasties rising and declining, which helped me better understand the patterns and the forces behind them. In these cases, a clearer picture emerged of how other influences, most importantly technology and acts of nature, played significant roles.

From examining all these cases across empires and across time, I saw that the great empires typically lasted roughly 250 years, give or take 150 years, with big economic, debt, and political cycles within them lasting about 50 to 100 years. By studying how these rises and declines worked individually, I could see how they worked on average in an archetypical way, and then I could examine how they worked differently and why. Doing that taught me a lot. My challenge now is trying to convey it to you.

You can miss seeing these cycles if you watch events too close up or if you are looking at the averages rather than the individual cases. Almost everyone talks about what is happening now and nobody talks about these big cycles, even though they are the biggest drivers of what is happening now. When looking at the whole or at averages, you don't see the individual cases of rises and declines, which are far greater. For example, looking at a stock market average (e.g., the S&P 500) and not looking at individual companies will lead you to miss the important fact that almost all the individual cases that make up the average have periods of birth, growth, and death. If you experienced any one of these, you would have had a hell of a ride up followed by a hell of a ride down into ruin unless you diversified and rebalanced your bets (e.g., the way it is done by S&P to create the index) or were able to discern the rising periods from the declining periods ahead of the crowd so as to be able to move well. By "move" I don't just mean move your position in markets—in the case of rising and falling empires, I mean "move" in nearly everything, including where you live.

This leads me to my next point: ● ***to see the big picture, you can't focus on the details.*** While I will attempt to paint this big, sweeping picture accurately, I can't paint it in a precise way. Also, in order for you to see it and understand it, you can't try to do so in a precise way. That is because we are looking at mega-macro cycles and evolution over very long time frames. To see them, you will have to let go of the details. Of course, when the details are important, which they often are, we will need to go from the very big imprecise picture to a more detailed one.

Looking at what happened in the past from this mega-macro perspective will radically alter how you see things. For example, because the span of time covered is so large, many of the most fundamental things that we take for granted and many of the terms we use to describe them do not exist over the full period of time. As a result, I will be imprecise in my wording so that I can convey the big picture without getting tripped up on what might seem to be big things but, in the scope of what we are looking at, are relative details.

For example, I wrestled with how much I should worry about the differences between countries, kingdoms, nations, states, tribes, empires, and dynasties. Nowadays we think mostly in terms of countries. However, countries as we know them didn't come into existence until the 17th century, after the Thirty Years' War in Europe. In other words, before then there were no countries—generally speaking, though not always, there were states and kingdoms instead. In some places, kingdoms still exist and can be confused with being countries, and in some places they are both. Generally speaking, though not always, kingdoms are small, countries are bigger, and empires are biggest (spreading beyond the kingdom or the country). The relationships between them are often not all that clear. The British Empire was mostly a kingdom that gradually evolved into a country and then into an empire that extended way beyond England's borders, so that its leaders controlled broad areas and many non-English peoples.

It's also the case that each of these types of singularly controlled entities—states, countries, kingdoms, tribes, empires, etc.—controls its population in different ways, which further confuses things for those who seek precision. For example, in some cases empires are areas that are occupied by a dominant power, while in other cases empires are areas influenced by a dominant power through threats and rewards. The British Empire generally occupied the countries in its empire while the American Empire has controlled more via rewards and threats—though that is not entirely true, as at the time of this writing the US has military bases in at least 70 countries. Though it is clear that there is an American Empire, it is less clear exactly what is in it. Anyway, you get my point—that trying to be precise can stand in the way of conveying the biggest, most important things. So you are going to have to bear with my sweeping imprecisions. You will also understand why I will henceforth imprecisely call these entities countries, even though not all of them were countries, technically speaking.

Along these lines, some will argue that my comparing different countries with different systems in different times is impossible. While I can understand that perspective, I want to assure you that I will seek to explain whatever major differences exist and that the timeless and universal similarities are much greater than the differences. It would be tragic to let the differences stand in the way of seeing the similarities that provide us with the lessons of history we need.

REMEMBER THAT WHAT I DON'T KNOW IS MUCH GREATER THAN WHAT I KNOW

In asking these questions, from the outset I felt like an ant trying to understand the universe. I had many more questions than answers, and I knew that I was delving into numerous areas that others have devoted their lives to studying. One of the benefits of my circumstances is that I can speak with the world's best scholars who have studied history in depth as well as with the people who are in, or have been in, the positions of making history. This allowed me to triangulate with the best of them. While each had in-depth perspectives on some pieces of the puzzle, none had the holistic understanding that I needed to adequately answer all my questions. But by speaking with all of them and triangulating what I learned with the research I did myself, the pieces started to fall into place.

The people and tools at Bridgewater were also invaluable to this research. Because the world is a complicated place, playing the highly competitive game of making sense of the past, processing what's going on in the present, and using that information to bet on the future requires hundreds of people and great computer power. For example, we actively consume about a hundred million data series that are run through our logic frameworks that systematically convert this information into trades in every market we can trade within every major country in the world. I believe that our ability to see and process information about all major countries and all major markets is unparalleled. It was through this machine that I could see and attempt to understand how the world I'm living in works and I relied on it in doing this study.

Still, I can't be sure that I'm right about anything.

While I have learned an enormous amount that I will put to good use, I know that what I know is still only a tiny portion of what I need to know to be confident in my outlook for the future. I also know from experience that if I wait to learn enough to be satisfied with what I know before acting or sharing, I'd never be able to use or convey what I have learned. So please understand that while this study will provide you with my very top-down, big-picture perspective on what I've learned and my very low-confidence outlook for the future, you should approach my conclusions as theories rather than facts. Keep in mind that even with all of this, I have been wrong more times than I can remember, which is why I value diversification of my bets above all else. So please realize that I'm just doing the best I can to openly convey my thinking to you.

You might be wondering why I wrote this book. In the past, I would have been silent about what I've learned. However, I am now in the phase of my life that silently achieving more isn't as important to me as passing along what I have learned in the hope that it can be of use to others. My main objectives are to convey to you my model for how the world works—to share with you a single digestible story of the last 500 years that shows how and why history "rhymes" with what is happening today—and to help you and others make better decisions so we all might have a better future.

HOW THIS STUDY IS ORGANIZED

As with all my studies, I will attempt to convey what I learned in both shorter, simpler ways (such as videos you can find online), longer, more comprehensive ways (like this book), and even more comprehensive ways for those who want additional charts and historical examples (available along with everything else not printed in the book at economicprinciples.org). In order to make the most important concepts easy to understand, this book is written in the vernacular, favoring clarity over precision. As a result, some of my wording will be by and large accurate but not always precisely so.

In Part I, I will summarize all that I learned in a simplified archetype of the rises and declines of empires, drawing from all my research of specific cases. I will first distill my findings into an index of the total power of empires, which provides an overview of the ebbs and flows of different powers and which is constituted from eight indices of different types of power. I will then go into more detail on a list of 18 determinants that I believe to be the key forces behind the rises and falls of empires and then I will cover in more detail the three big cycles mentioned previously. **In Part II, I will show the individual cases in greater depth, walking through the story of the major reserve currency empires over the last 500 years, including a chapter focused on the present day conflicts between the US and China. Finally, in the concluding Part III, I will discuss what all of this means for the future.**

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[1] To be clear, while I am describing these cycles of the past, I'm not one of those people who believes that what happened in the past will necessarily continue into the future without understanding the cause/effect mechanics that drive changes. My objective above all else is to have you join with me in looking at the

cause/effect relationships and then to use that understanding to explore what might be coming at us and agree on principles to handle it in the best possible way.

[2] For example, I have followed this approach for debt cycles because I've had to navigate many of them over the last 50 years and they are the most important force driving big shifts in economies and markets. If you are interested in my template for understanding big debt crises and seeing all the cases that make it up, you can get *Principles for Navigating Big Debt Crises* in free digital form at economicprinciples.org or in print form for sale in bookstores or online. I've studied many big, important things (e.g., depressions, hyperinflation, wars, balance of payments crises, etc.) by following this approach, usually because I was compelled to understand unusual things that appeared to be germinating around me. It was that perspective that allowed Bridgewater to navigate the 2008 financial crisis well when others struggled.

[3] I approach just about everything this way. For example, in building and running my business, I had to understand the realities of how people think and learn principles for dealing with these realities well, which I did using this same approach. If you are interested in what I learned about such non-economic and non-market things, I conveyed it in my book *Principles: Life and Work*, which is free in an iOS/Android app called Principles in Action or is for sale in the usual bookstores.

[4] In my book *Principles: Life and Work*, I share my perspective on these different ways of thinking. I won't describe them here but will direct you there should you be interested.

PART I

HOW THE WORLD WORKS

CHAPTER 1

THE BIG CYCLE IN A TINY NUTSHELL

As explained in the introduction, the world order is now rapidly shifting in important ways that have never happened in our lifetimes but have happened many times before. My objective is to show you those cases and the mechanics that drove them and, with that perspective, attempt to imagine the future.

What follows here is an ultra-distilled description of the dynamics that I saw in studying the rises and declines of the last three reserve currency empires (the Dutch, the British, and the American) and the six other significant empires over the last 500 years (Germany, France, Russia, India, Japan, and China), as well as all of the major Chinese dynasties back to the Tang Dynasty in around the year 600. The purpose of this chapter is simply to provide an archetype to use when looking at all the cycles, most importantly the one that we are now in.

In studying these past cases, I saw clear patterns that occurred for logical reasons that I briefly summarize here and cover more completely in subsequent chapters. While the focus of this chapter and this book are on those forces that affected the big cyclical swings in wealth and power, I also saw ripple-effect patterns in all dimensions of life, including culture and the arts, social mores, and more, which I will touch on later. Between this simple archetype and the cases shown in Part II, we will see how the individual cases fit the archetype (which is essentially just the average of those cases) and how well the archetype describes the individual cases. Doing this, I hope, will help us better understand what is happening now.

I'm on a mission to figure out how the world works and to gain timeless and universal principles for dealing with it well. It's both a passion and a necessity for me. While the curiosities and concerns that I described earlier pulled me into doing this study, the process of conducting it gave me a much greater understanding of the really big picture on how the world works than I expected to get, and I want to share it with you. It made much clearer to me how peoples and countries succeed and fail over long swaths of time, it revealed giant cycles behind these ups and downs that I never knew existed, and, most importantly, it helped me put into perspective where we now are.

For example, through my research, **I learned that the biggest thing affecting most people in most countries through time is the struggle to make, take, and distribute wealth and power, though they also have struggled over other things too, most importantly ideology and religion**. These struggles happened in timeless and universal ways and had huge implications for all aspects of people's lives, unfolding in cycles like the tide coming in and out.

I also saw how, throughout time and in all countries, the people who have the wealth are the people who own the means of wealth production. In order to maintain or increase their wealth, they work with the people who have the political power, who are in a symbiotic relationship with them, to set and enforce the rules. I saw how this happened similarly across countries and across time. While the exact form of it has evolved and will continue to evolve, the most important dynamics have remained pretty much the same. The classes of those who were wealthy and powerful evolved over time (e.g., from monarchs and nobles who were landowners when agricultural land was the most important source of wealth, to capitalists and elected or autocratic political officials now that capitalism produces capital assets and that wealth and political power are generally not passed along in families) but they still cooperated and competed in basically the same ways.

I saw how, over time, this dynamic leads to a very small percentage of the population gaining and controlling exceptionally large percentages of the total wealth and power, then becoming overextended, and then encountering bad times, which hurt those least wealthy and least powerful the hardest, which then leads to conflicts that produce

revolutions and/or civil wars. When these conflicts are over, a new world order is created, and the cycle begins again.

In this chapter, I will share more of this big-picture synthesis and some of the details that go along with it. While what you're reading here are my own views, you should know that the ideas I express in this book have been well-triangulated with other experts. About two years ago, when I felt that I needed to answer the questions I described in the introduction, I decided to immerse myself in studying with my research team, digging through archives, speaking with the world's best scholars and practitioners who each had in-depth understandings of bits and pieces of the puzzle, reading relevant great books by insightful authors, and reflecting on the prior research I've done and the experiences that I've had from investing globally for nearly 50 years.

Because I view this as an audacious, humbling, necessary, and fascinating undertaking, I am worried about missing important things and being wrong, so my process is iterative. I do my research, write it up, show it to the world's best scholars and practitioners to stress test it, explore potential improvements, write it up again, stress test it again, and so on, until I get to the point of diminishing returns. This study is the product of that exercise. While I can't be sure that I have the formula for what makes the world's greatest empires and their markets rise and fall exactly right, I'm pretty confident that I got it by and large right. I also know that what I learned is essential for my putting what is happening now into perspective and for imagining how to deal with important events that have never happened in my lifetime but have happened repeatedly throughout history.

UNDERSTANDING THE BIG CYCLE

For reasons that are explained in this book, I believe that we are now seeing an archetypical big shift in relative wealth and power and the world order that will affect everyone in all countries in profound ways. This big wealth and power shift is not obvious because most people don't have the patterns of history in their minds to see this one as "another one of those." So in this first chapter, I will describe in a very brief way how I see the archetypical mechanics behind rises and declines of empires and their markets working. I have identified 18 important determinants that have explained almost all of the basic ebbs and flows through time that have caused ups and downs in empires. We will look at them in a moment. Most of them transpire in classic cycles that are mutually reinforcing in ways that tend to create a single very big cycle of ups and downs. This archetypical Big Cycle governs the rising and declining of empires and influences everything about them, including their currencies and markets (which I'm especially interested in). **The most important three cycles are the ones I mentioned in the introduction: the long-term debt and capital markets cycle, the internal order and disorder cycle, and the external order and disorder cycle.**

Because these three cycles are typically the most important, we will be looking at them in some depth in later chapters. Then we will apply them to history and the present day so that you can see how they play out in real examples.

These cycles drive swings back and forth between opposites—swings between peace and war, economic boom and bust, the political left and political right being in power, the coalescing and disintegrating of empires, etc.—that typically occur because people push things to extremes that surpass their equilibrium levels, which leads to swings that get overdone in the opposite direction. **Embedded in the swings in one direction are the ingredients that lead to the swings in the opposite direction.**

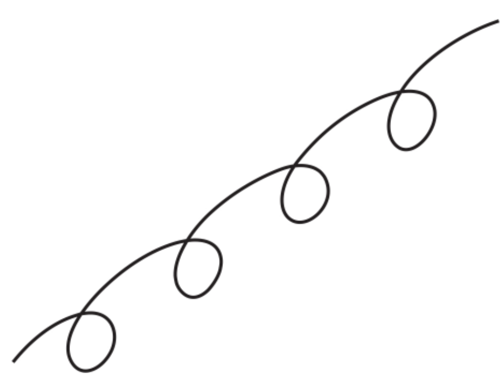
These cycles have remained essentially the same through the ages for essentially the same reason that the fundamentals of the human life cycle have remained the same over the ages: because human nature doesn't change much over time. For example, fear, greed, jealousy, and other basic emotions have remained constants and are big influences that drive cycles.

While it is true that no two people's life cycles are exactly the same and the typical life cycle has changed over the millennia, the archetype of the human life cycle—of children being raised by parents until they are independent, at which point they raise their own children and work, which they do until they get old, retire, and die—remains essentially the same. Similarly the big money/credit/capital markets cycle, which builds up too much debt and debt assets (e.g., bonds) until the debts can't be serviced with hard money, remains essentially the same. As always, this leads to people trying to sell their debt assets to make purchases and finding out they can't because there are far too many debt assets relative to the amount of money and the value of stuff there is to buy. Once this happens, defaults prompt those who manufacture money to make more. That cycle has been essentially the same for thousands of years. So have the cycles of internal order and disorder and external order and disorder. We will explore how human nature and other dynamics drive these cycles in the coming chapters.

EVOLUTION, CYCLES, AND THE BUMPS ALONG THE WAY

Evolution is the biggest and only permanent force in the universe, yet we struggle to notice it. While we see what exists and what happens, we don't see evolution and the evolutionary forces that make things exist and happen. Look around you. Do you see evolutionary change? Of course not. Yet you know that what you are looking at is changing—albeit slowly from your perspective—and you know that in time it won't exist and other things will exist in its place. To see this change, we have to devise ways to measure things and watch the measurements change. Then, once we can see the change, we can study why it happens. This is what we must do if we are going to successfully think about the changes ahead and how to deal with them.

Evolution is the upward movement toward improvement that occurs because of adaptation and learning. Around it are cycles. To me, most everything transpires as an ascending trajectory of improvement with cycles around it, like an upward-pointing corkscrew:



Evolution is a relatively smooth and steady improvement because the gaining of knowledge is greater than the losing of knowledge. Cycles on the other hand move back and forth, producing excesses in one direction that lead to reversals and excesses in the other, like the swinging of a pendulum. For example, over time our living standards rise because we learn more, which leads to higher productivity, but we have ups and downs in the economy because we have debt cycles that drive actual economic activity up and down around that uptrend. These evolutionary and sometimes revolutionary changes around the trend are not always smooth and painless. Sometimes they are very abrupt and painful as mistakes are made, learning occurs, and better adaptations result.

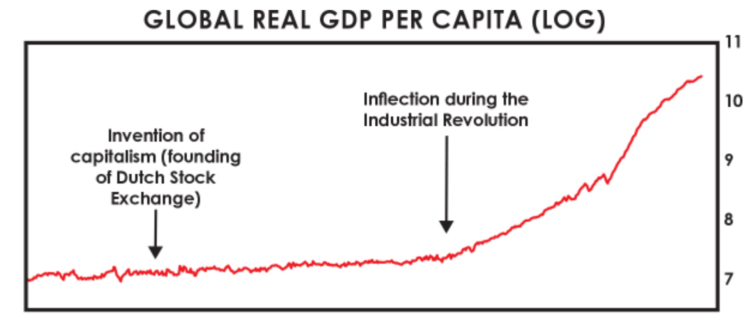
Together evolution and cycles make the upward corkscrew-type movements that we see in everything—wealth, politics, biology, technology, sociology, philosophy, etc.

Human productivity is the most important force in causing the world's total wealth, power, and living standards to rise over time. Productivity—i.e., the output per person, driven by learning, building, and inventiveness—has steadily improved over time. However, it has risen at different rates for different people, though always for the same reasons—because of the quality of people's education, inventiveness, work ethic, and economic systems to turn ideas into output. These reasons are important for policy makers to understand in order to achieve the best possible outcomes for their countries, and for investors and companies to understand in order to determine where the best long-term investments are.

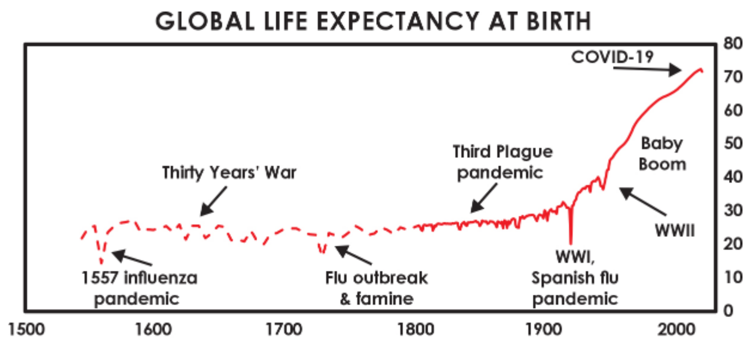
This constantly increasing trend is the product of humanity's capacity to evolve, which is greater than any other species' because our brain gives us a unique capacity to learn and think abstractly. As a result, our inventions of technologies and ways of doing things have advanced uniquely. That evolution has led to the continuous evolutions that make up the changing world order. Technological advances in communications and transportation have brought everyone in the world closer together, which has changed the nature of relationships of people and empires in profound ways. We see such evolutionary improvements apparent in just about everything—greater life expectancy, better products, better ways of doing things, etc. Even our way of evolving has evolved in the form of coming up with better ways to create and innovate. This has been true for as long as human history has been written. As a result of this, charts of most everything show more upward slopes toward improvement than up and down movements.

This is shown in the following charts: estimated output (i.e., estimated real GDP) per person and life expectancy over the last 500 years. These are probably the two most widely agreed-upon measures of well-being, though they are imperfect. You can see the magnitudes of their evolutionary uptrends relative to the magnitudes of the swings around them.

The fact that the trends are so pronounced relative to the swings around the trends shows how much more forceful the power of human inventiveness is relative to everything else. As shown from this top-down, big-picture perspective, output per person appears to be steadily improving, though very slowly in the early years and faster starting in the 19th century, when the slope up becomes much steeper, reflecting the faster productivity gains. This shift from slower productivity gains to faster productivity gains was primarily due to the improvements in broad learning and the conversion of that learning into productivity. That was brought about by a number of factors going as far back as Gutenberg's printing press in Europe in the mid-15th century (printing had already been in use in China for centuries), which increased the knowledge and education available to many more people, contributing to the Renaissance, the Scientific Revolution, the Enlightenment, the invention of capitalism, and the First Industrial Revolution in Britain. We will delve into these shortly.



Global real GDP is primarily a mix of European countries before 1870 due to limited reliable data coverage across other countries before that point



Dashed line based on experience of Great Britain only

The broader-based improvements in productivity that came from the invention of capitalism, entrepreneurship, and the Industrial Revolution also shifted wealth and power away from an agriculture-based economy in which landownership was the principal source of power, and monarchs, nobles, and the clergy worked together to maintain their grip on it. The shift moved toward an industry-based economy in which inventive capitalists created and owned the means of production of industrial goods and worked together with those in government to maintain the system that allowed them to have the wealth and power. In other words, since the Industrial Revolution, which brought about that change, we have been operating in a system in which wealth and power have primarily come more from the combination of education, inventiveness, and capitalism, with those who run governments working with those who control most of the wealth and education.

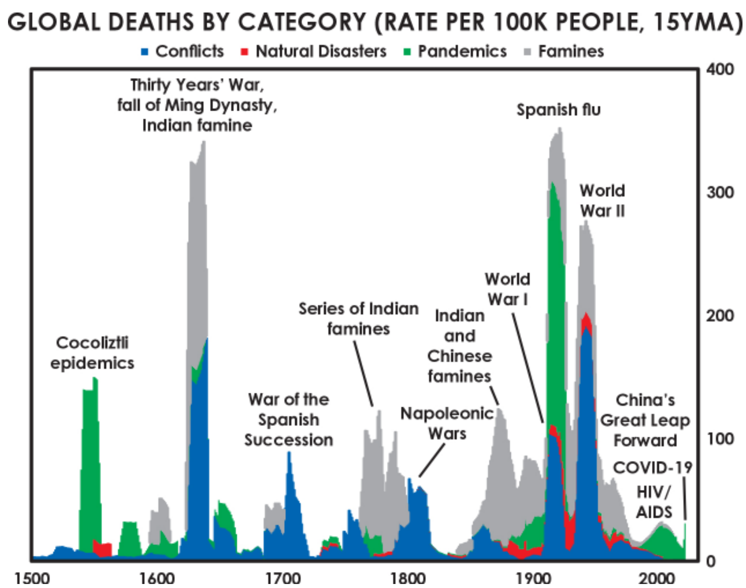
How this evolution with big cycles around it happens also continues to evolve. For example, while ages ago agricultural land and agricultural production were worth the most and that evolved into machines and what they produced being worth the most, digital things that have no apparent physical existence (data and information processing) are now evolving to become worth the most.[5] This is creating a fight over who obtains the data and how they use it to gain wealth and power.

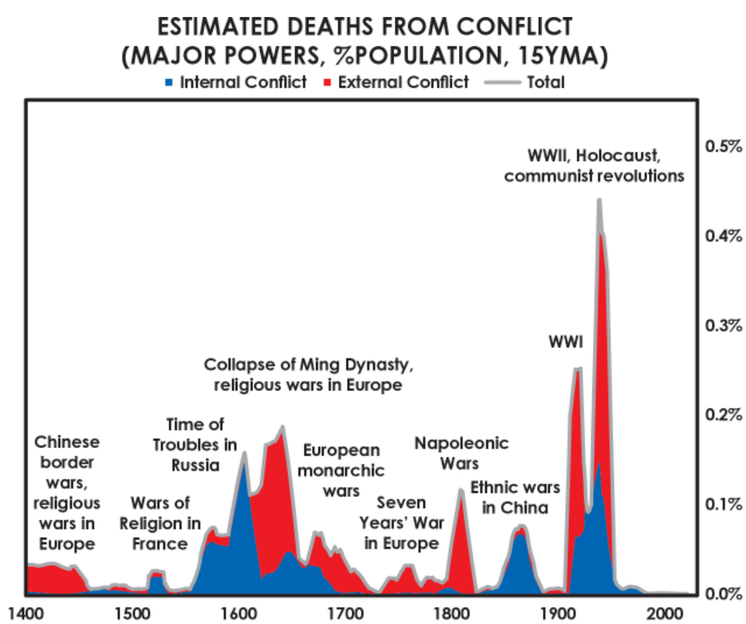
THE CYCLES AROUND THE UPTREND

While significant, because these learnings and productivity improvements are evolutionary, they don't cause big abrupt shifts in who has what wealth and power. The big abrupt shifts come from booms, busts, revolutions, and wars, which are primarily driven by cycles, and these cycles are driven by logical cause/effect relationships. For example, the forces of increased productivity, entrepreneurship, and capitalism that marked the end of the 19th century also produced big wealth gaps and overindebtedness that led to economic downturns that, in the first half of the 20th century, led to anti-capitalism, communism, and big conflicts over wealth and power within and between countries. What you can see is evolution marching on with big cycles around it. ● ***Throughout time, the formula for success has been a system in which well-educated people, operating civilly with each other, come up with innovations, receive funding through capital markets, and own the means by which their innovations are turned into the production and allocation of resources, allowing them to be rewarded by profit making.*** **However, over the long run capitalism has created wealth and opportunity gaps and overindebtedness that have led to economic downturns and revolutions and wars that have caused changes in the domestic and world orders.**

As you can see in the following charts, history shows us that almost all of these turbulent times were due to fighting over wealth and power (i.e., conflicts in the form of revolutions and wars, often driven by money and credit collapses and big wealth gaps), and severe acts of nature (like droughts, floods, and epidemics). It also shows that how bad these periods get depends almost exclusively on how strong countries are and their ability to endure them.

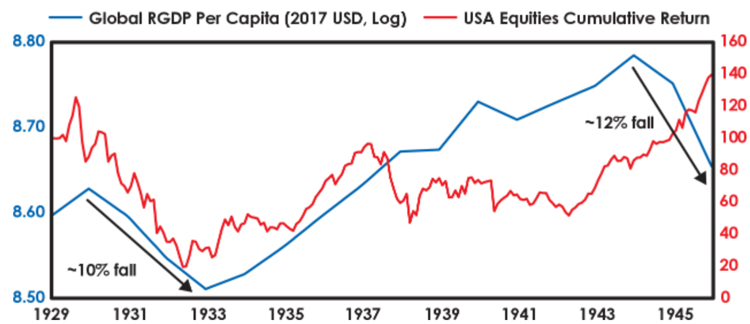
Countries with large savings, low debts, and a strong reserve currency can withstand economic and credit collapses better than countries that don't have much savings, have a lot of debt, and don't have a strong reserve currency. Likewise those that have strong and capable leadership and civil populations can be managed better than those that don't have these, and those that are more inventive will adapt better than those that are less inventive. As you will see later, these factors are measurable timeless and universal truths.





Based on deaths as a share of the population for the major powers and thus will differ from the estimate of global conflict deaths shown in the prior chart

Because these turbulent times are small in relation to the evolutionary uptrend of humanity's capacity to adapt and invent, they barely show up in the previous charts of GDP and life expectancy, appearing only as relatively minor wiggles. Yet these wiggles seem very big to us because we are so small and short-lived. Take the 1930–45 depression and war period, for example. The levels of the US stock market and global economic activity are shown in the next chart. As you can see, the economy fell by about 10 percent, and the stock market fell by about 85 percent and then began to recover.



This is part of the classic money and credit cycle that has happened for as long as there has been recorded history and that I will explain more completely in Chapter 3. Briefly, a credit collapse happens because there is too much debt. Typically, the central government has to spend a lot of money it doesn't have and make it easier for debtors to pay their debts and the central bank always has to print money and liberally provide credit—like they did in response to the economic plunge driven by the COVID pandemic and a lot of debt. The 1930s debt bust was the natural extension of the Roaring '20s boom that became a debt-financed bubble that popped in 1929. That produced a depression that led to big central government spending and borrowing financed by big money and credit creation by the central bank.

Back then, the popping of the bubble and the resulting economic bust were the biggest influences on the 1930–45 period's internal and external fights for wealth and power. Then, like now and like in most other cases, there were large wealth gaps and conflict, which when heightened by debt/economic collapses, led to revolutionary changes in social and economic programs and big wealth transfers that were manifest in different systems in different countries. Clashes and wars developed over which of these systems—e.g., capitalism or communism, democracy or autocracy—were best. **There are always arguments or fights between those who want to make big redistributions of wealth and those who don't.** In the 1930s, Mother Nature also gave the US a painful drought.

Looking over the whole of the cases I examined, past economic and market declines lasted about three years, give or take a few years, depending on how long it took to do the debt restructuring and/or debt monetization process. The quicker the printing of money to fill the debt holes, the quicker the closing of the deflationary depression and the sooner the worrying about the value of money began. In the 1930s US case, the stock market and the economy bottomed the day that the newly elected president, Franklin D. Roosevelt, announced that he would default on the government's promise to let people turn in their money for gold, and that the government would create enough money and credit so that people could get their money out of the banks and others could get money and credit to buy things and invest. That took three-and-a-half years from the initial stock market crash in October 1929.[6]

Still there was fighting over wealth and power within and between countries. The emerging powers of Germany and Japan challenged the existing leading world powers of Great Britain, France, and eventually the US (which was dragged into World War II). The war period raised the economic output of things that were used in the war, but it would be a misnomer to call the war years a "productive" period—even though when measured in output per person, it was—because there was so much destruction. At the end of the war, global GDP per capita had fallen by about 12 percent, much of which was driven by declines in the economies of countries that lost the war. The stress test that these years represented wiped out a lot, made clear who the winners and losers were, and led to a new beginning and a new world order in 1945. Classically that was followed by a lengthy period of peace and prosperity that became overextended so that all countries are now, 75 years later, being stress tested again.

Most cycles in history happen for basically the same reasons. For example, the 1907–19 period began with the Panic of 1907 in the US, which, like the 1929–32 money and credit crisis following the Roaring '20s, was the result of a boom period (the Gilded Age in the US, which was the same time as the Belle

Époque in continental Europe and the Victorian Era in Great Britain) becoming a debt-financed bubble that led to economic and market declines. These declines also happened when there were large wealth gaps that led to big wealth redistributions and contributed to a world war. The wealth redistributions, like those in the 1930–45 period, came about through large increases in taxes and government spending, big deficits, and big changes in monetary policies that monetized the deficits. Then the Spanish flu intensified the stress test and the resulting restructuring process. This stress test and global economic and geopolitical restructuring led to a new world order in 1919, which was expressed in the Treaty of Versailles. That ushered in the 1920s debt-financed boom, which led to the 1930–45 period and the same things happening again.

These periods of destruction/reconstruction devastated the weak, made clear who the powerful were, and established revolutionary new approaches to doing things (i.e., new orders) that set the stage for periods of prosperity that eventually became overextended as debt bubbles with large wealth gaps and led to debt busts that produced new stress tests and destruction/reconstruction periods (i.e., wars), which led to new orders and eventually the strong again gaining relative to the weak, and so on.

What are these destruction/reconstruction periods like for the people who experience them? Since you likely haven't been through one of these and the stories about them are very scary, the prospect of being in one is worrisome to most people. It is true that these destruction/reconstruction periods have produced tremendous human suffering both financially and, more importantly, in lost or damaged human lives. While the consequences are worse for some people, virtually no one escapes the damage. Still, without minimizing them, history has shown us that typically the majority of people stay employed in depressions, are unharmed in shooting wars, and survive natural disasters.

Some people who struggled through them have even described these very difficult times as bringing about important, good things like drawing people closer together, building strength of character, learning to appreciate the basics, etc. For example, Tom Brokaw called the people who went through the 1930–45 period "the Greatest Generation" because of the strength of character it gave them. My parents and aunts and uncles who went through the Great Depression and World War II, as well as others of their era whom I've spoken to in other countries who went through their own versions of this destruction period, saw it that way too. Keep in mind that economic destruction periods and war periods typically don't last very long—roughly two or three years. And the lengths and severities of natural disasters (like droughts, floods, and epidemics) vary, though they typically lessen in painfulness as adaptations are made. One rarely gets all three of these types of big crises—economic, revolution/war, and natural disaster—at the same time.

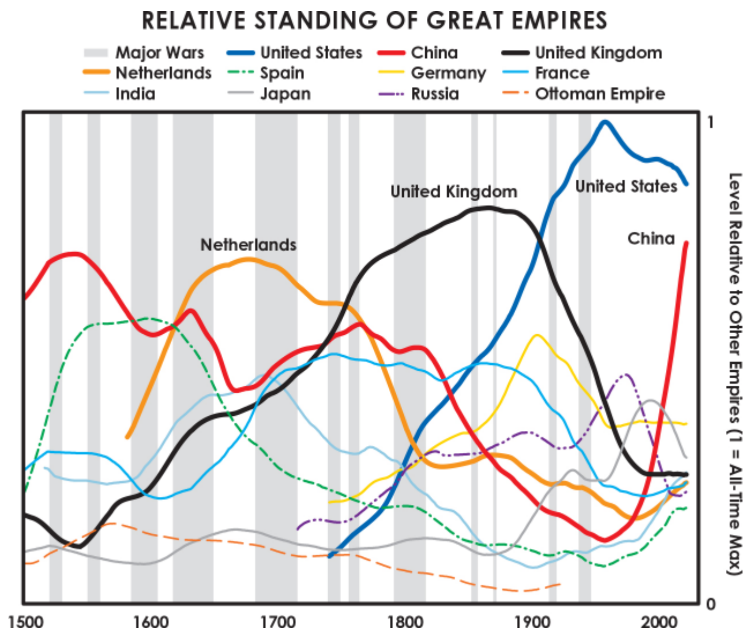
My point is that **while these revolution/war periods typically lead to a lot of human suffering, we should never, especially in the worst of times, lose sight of the fact that one can navigate them well—and that humanity's power to adapt and quickly get to new and higher levels of well-being is much greater than all the bad stuff that can be thrown at us**. For that reason, I believe that it is smart to trust and invest in humanity's adaptability and inventiveness. So, while I am pretty sure that in the coming years both you and I and the world order will experience big challenges and changes, I believe that humanity will become smarter and stronger in very practical ways that will lead us to overcome these challenging times and go on to new and higher levels of prosperity.

Now let's look at the cycles of rises and declines in the wealth and power of the major countries over the last 500 years.

PAST BIG CYCLE SHIFTS IN WEALTH AND POWER

The chart of rising productivity shown earlier was for the whole world (to the best of our ability to measure it). It doesn't show the shifts in wealth and power that occurred between countries. To understand how those happen, let's start with the big-picture basics. Throughout recorded history various forms of groups of people (e.g., tribes, kingdoms, countries, etc.) have gained wealth and power by building it themselves, taking it from others, or finding it in the ground. When they gathered more wealth and power than any other group, they became the world's leading power, which allowed them to determine the world order. When they lost that wealth and power, which they all did, the world order—and all aspects of life—changed in profound ways.

The next chart shows the relative wealth and power of the 11 leading empires over the last 500 years.

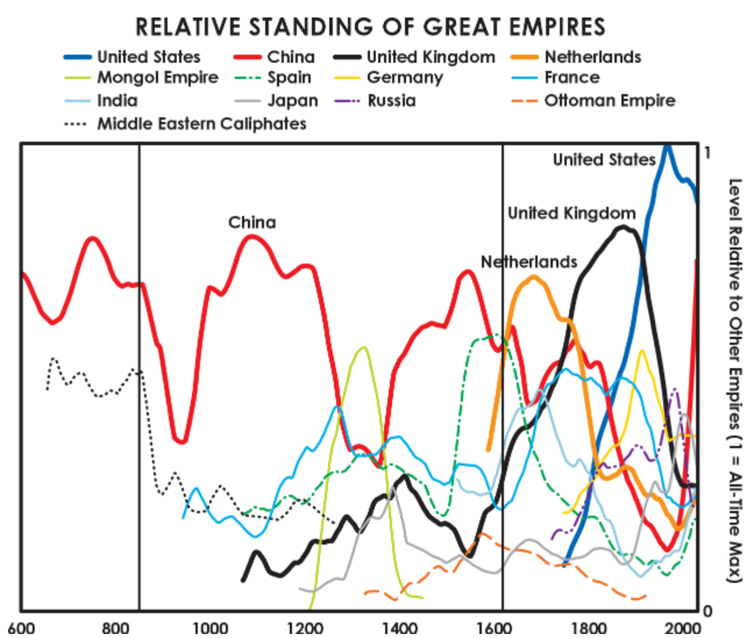


Each one of these indices[7] of wealth and power is a composite of eight different determinants that I will explain shortly. Though these indices aren't perfect because all data through time isn't perfect, they do an excellent job of painting the big picture. As you can see, nearly all of these empires saw periods of ascendancy followed by periods of decline.

Take a moment to study the thicker lines on the chart, which represent the four most important empires: the Dutch, British, American, and Chinese. These empires held the last three reserve currencies—the US dollar now, the British pound before it, and the Dutch guilder before that. China is included because it has risen to be the second most powerful empire/country and because it was so consistently powerful in most years prior to around 1850. To very briefly summarize the story this chart shows:

- **China was dominant for centuries (consistently out-competing Europe economically and otherwise), though it entered a steep decline starting in the 1800s.**
- **The Netherlands, a relatively small country, became the world's reserve currency empire in the 1600s.**
- **The UK followed a very similar path, peaking in the 1800s.**
- **Finally, the US rose to become the world's superpower over the last 150 years, though particularly during and after World War II.**
- **The US is now in relative decline while China is rising again.**

Now let's look at the same chart that extends the data all the way back to the year 600. I focused on the first chart (which covers just the last 500 years) rather than the second (which covers the last 1,400 years) because it highlights the empires I studied most intently and is simpler—though with 11 countries, 12 major wars, and over 500 years, it can hardly be called simple. Still, the second is more extensive and worth glancing at. I left out the shading of the war periods to lessen the complexity. As shown, **in the pre-1500 period, China was almost always the most powerful, though the Middle Eastern caliphates, the French, the Mongols, the Spanish, and the Ottomans were also in the picture**.

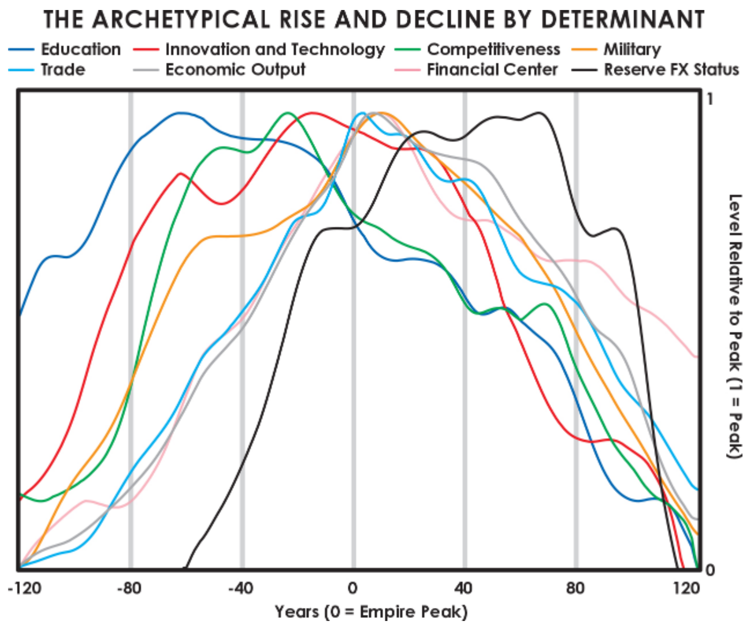


An important thing to remember: while the leading powers covered in this study were the richest and most powerful, they weren't necessarily the best-off countries for two reasons. First, while wealth and power are what most people want and will fight over most, some people and their countries don't think that these things are the most important and wouldn't think of fighting over them. Some believe that having peace and savoring life are more important than having a lot of wealth and power and wouldn't consider fighting hard enough to gain enough of the wealth and power to make it into this study, though some of them enjoyed greater amounts of peace than those who fought for wealth and power. (By the way, I think there is a lot to be said for putting peace and savoring life ahead of gaining wealth and power—interestingly, there was little correlation between the wealth and power of a nation and the happiness of its people, which is a subject for another time.) Second, this group of countries excludes what I will call the "boutique countries" (like Switzerland and Singapore) that score very high in wealth and living standards but aren't large enough to become one of the biggest empires.

EIGHT DETERMINANTS OF WEALTH AND POWER

The single measure of wealth and power that I showed you for each country in the prior charts is a roughly equal average of 18 measures of strength. While we will explore the full list of determinants later, let's begin by focusing on the key eight shown in the next chart: **1) education, 2) competitiveness, 3) innovation and technology, 4) economic output, 5) share of world trade, 6) military strength, 7) financial center strength, and 8) reserve currency status**.

This chart shows the average of each of these measures of strength across all the empires I studied, with most of the weight on the most recent three reserve countries (i.e., the US, the UK, and the Netherlands).[8]

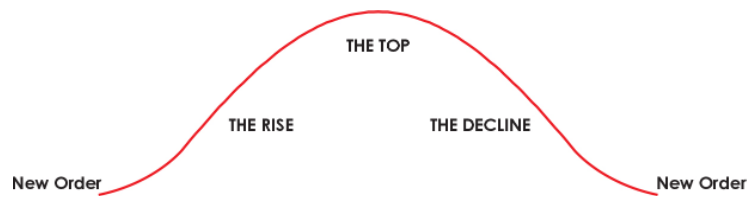


The lines in the chart do a pretty good job of telling the story of why and how the rises and declines took place. You can see how rising education leads to increased innovation and technology, which leads to an increased share of world trade and military strength, stronger economic output, the building of the world's leading financial center, and, with a lag, the establishment of the currency as a reserve currency. And you can see how for an extended period most of these factors stayed strong together and then declined in a similar order. The common reserve currency, just like the world's common language, tends to stick around after an empire has begun its decline because the habit of usage lasts longer than the strengths that made it so commonly used.

I call this cyclical, interrelated move up and down the Big Cycle. Using these determinants and some additional dynamics, I will next describe the Big Cycle in more detail. But before I start, it's worth reiterating that all of these measures of strength rose and declined over the arc of the empire. That's because these **strengths and weaknesses are mutually reinforcing**—i.e., strengths and weaknesses in education, competitiveness, economic output, share of world trade, etc., contribute to the others being strong or weak, for logical reasons.

THE ARCHETYPICAL BIG CYCLE

Broadly speaking, we can look at these rises and declines as happening in three phases:



The Rise:
The rise is the prosperous period of building that comes after a new order. It is when the country is fundamentally strong because there are a) relatively low levels of indebtedness, b) relatively small wealth, values, and political gaps between people, c) people working effectively together to produce prosperity, d) good education and infrastructure, e) strong and capable leadership, and f) a peaceful world order that is guided by one or more dominant world powers, which leads to...

The Top:
This period is characterized by excesses in the form of a) high levels of indebtedness, b) large wealth, values, and political gaps, c) declining education and infrastructure, d) conflicts between different classes of people within countries, and e) struggles between countries as overextended empires are challenged by emerging rivals, which leads to...

The Decline:
This is the painful period of fighting and restructuring that leads to great conflicts and great changes and the establishment of new internal and external orders. It sets the stage for the next new order and a new period of prosperous building.

Let's look at each of these in more detail.

THE RISE

The rise phase begins when there is...

- ... **strong enough and capable enough leadership to gain power and design an excellent system to increase the country's wealth and power**. Looking at the historically great empires, this system typically involves...
- ... **strong education**, which is not just teaching knowledge and skills; it also includes teaching...
- ... **strong character, civility, and work ethic development**. These are typically taught in families, schools, and/or religious institutions. If done well, this provides a healthy respect for rules and laws and order within society, leads to low corruption rates, and is effective in encouraging people to work together to improve productivity. The better the country does this, the more there will be a shift from producing basic products to...
- ... **innovating and inventing new technologies**. For example, the Dutch were superbly inventive—at their peak they came up with a quarter of all major inventions in the world. One of these were ships that could travel around the globe to collect great riches. They also invented capitalism as we know it. Innovation is generally enhanced by being...
- ... **open to the best thinking in the world** to be able to learn the best ways of doing things and by...
- ... **the workers, the government, and the military all working well together**.

As a result of all of these things, the country...

- ... becomes more **productive** and...
- ... more **competitive in world markets**, which shows up in its...

- ... **share of world trade rising**. You can see this happening today as the US and China are now roughly comparable in both their economic outputs and their shares of world trade.
- As a country trades more globally, it must protect its trade routes and foreign interests and it must be prepared to defend itself from attack so it develops **great military strength**.

If done well, this virtuous cycle leads to...

- ... **strong income growth**, which can be used to finance...
- ... **investments in infrastructure, education, and research and development**.
- **The country must develop systems to incentivize and empower those who have the ability to make or get wealth**. In all of these past cases, the most successful empires used a capitalist approach to incentivize and develop productive entrepreneurs. Even China, which is run by the Chinese Communist Party, uses a state-capitalism approach to incentivize and enable people. To do that incentivizing and financial enabling well, the country...
- ... has to have **developing capital markets**—most importantly its lending, bond, and stock markets. That allows people to **convert their savings into investments to fund innovation and development** and share in the successes of those who are making great things happen. The inventive Dutch created the first publicly listed company (the Dutch East India Company) and the first stock market to fund it. These were integral parts of their machine that produced a lot of wealth and power.
- As a natural consequence, all of the greatest empires developed **the world's leading financial center** for attracting and distributing the capital of their times. Amsterdam was the world's financial center when the Dutch were preeminent, London was when the British were on top, New York is now, and China is quickly developing its own financial center in Shanghai.
- As the country expands its international dealings to become the largest trading empire, its transactions can be paid in its currency, and people

around the world want to save in it, so it becomes **the world's leading reserve currency**, which enables the country to borrow more, and at lower rates, than other countries because others want to lend in it.

This series of cause/effect relationships leading to mutually supportive financial, political, and military powers has gone together for as long as there has been recorded history. **All of the empires that became the most powerful in the world followed this path to the top.**

THE TOP

In the top phase, the country sustains the successes that fueled its rise, but embedded in the rewards of the successes are the seeds of decline. Over time, obligations pile up, breaking down the self-reinforcing circumstances that fueled the rise.

- **As people in the country, which is now rich and powerful, earn more, that makes them more expensive and less competitive** relative to people in other countries who are willing to work for less.
- At the same time people from **other countries naturally copy the methods and technologies of the leading power, which further reduces the leading country's competitiveness**. For example, British shipbuilders hired Dutch designers to design better ships that were built by less expensive British workers, making them more competitive, which led the British to rise and the Dutch to decline.
- Also, **as people in the leading country become richer, they tend to not work as hard. They enjoy more leisure, pursue the finer and less productive things in life, and at the extreme become decadent**. Values change from generation to generation during the rise to the top—from those who had to fight to achieve wealth and power to those who inherited it. The new generation is less battle-hardened, steeped in luxuries, and

accustomed to the easy life, which makes them **more vulnerable to challenges**.

- Additionally, **as people get used to doing well, they increasingly bet on the good times continuing—and borrow money to do that—which leads to financial bubbles**.
- Within capitalist systems, **financial gains come unevenly so the wealth gap grows**. Wealth gaps are self-reinforcing because rich people use their greater resources to expand their powers. **They also influence the political system to their advantage and give greater privileges to their children—like better education—causing the gaps in values, politics, and opportunity to develop between the rich "haves" and the poor "have-nots." Those who are less well-off feel the system is unfair so resentments grow.**
- **As long as the living standards of most people are still rising, these gaps and resentments don't boil over into conflict.**

During the top, the leading country's financial picture begins to change. Having a **reserve currency** gives it the "exorbitant privilege"[9] of being able to borrow more money, which gets it deeper into debt. This boosts the leading empire's spending power over the short term and weakens it over the longer run.

- **Inevitably, the country begins borrowing excessively, which contributes to the country building up large debts with foreign lenders.**
- While this boosts spending power over the short term, **it weakens the country's financial health—and weakens the currency—over the longer term. In other words, when borrowing and spending are strong, the empire appears very strong, but its finances are in fact being weakened because the borrowing sustains the country's power beyond its fundamentals by financing both domestic overconsumption and international military conflicts** required to maintain the empire.

- Also the costs of maintaining and defending the empire become greater than the revenue it brings in, so **having an empire becomes unprofitable**. For example, the British Empire became massive, bureaucratic, and lost its competitive advantages as rival powers—particularly Germany—soared, leading to an increasingly expensive arms race and world war.
- The **richer countries get into debt by borrowing from poorer countries that save more**—that is one of the earliest signs of a wealth and power shift. This started in the United States in the 1980s when it had a per capita income 40 times that of China's and started borrowing from the Chinese who wanted to save in dollars because the dollar was the world's reserve currency.
- **If the empire begins to run out of new lenders, those holding their currency begin to look to sell and get out rather than buy, save, lend, and get in—and the strength of the empire begins to fall.**

THE DECLINE

The decline phase typically comes from internal economic weakness together with internal fighting, or from costly external fighting, or both. Typically, the country's decline comes gradually and then suddenly.

Internally...

- When debts become very large, and **there is an economic downturn** and the empire can no longer borrow the money necessary to repay its debts, this creates great domestic hardships and forces the country to choose between **defaulting on its debts and printing a lot of new money**.
- **The country nearly always chooses to print a lot of new money**, at first gradually and eventually massively. This **devalues the currency and raises inflation**.

- Typically at those times when the government has problems funding itself—at the same time as there are bad financial and economic conditions, and large wealth, values, and political gaps—there are great **increases in internal conflict between the rich and poor and different ethnic, religious, and racial groups**.
- **This leads to political extremism that shows up as populism of the left or of the right.** Those of the left seek to redistribute the wealth while those of the right seek to maintain the wealth in the hands of the rich. **This is the "anti-capitalist phase," when capitalism, capitalists, and the elites in general are blamed for the problems.**
- Typically during such times **taxes on the rich rise, and when the rich fear their wealth and well-being will be taken away, they move to places, assets, and currencies they feel safer in. These outflows reduce the country's tax revenue, which leads to a classic self-reinforcing, hollowing-out process.**
- **When the flight of wealth gets bad enough, the country outlaws it. Those seeking to get out begin to panic.**
- **These turbulent conditions undermine productivity**, which **shrinks the economic pie** and causes **more conflict about how to divide the shrinking resources**. Populist leaders emerge from both sides and pledge to take control and bring about order. **That's when democracy is most challenged because it fails to control the anarchy and because the move to a strong populist leader who will bring order to the chaos is most likely.**
- As conflict within the country escalates, it leads to some form of **revolution or civil war to redistribute wealth and force the big changes**. This can be peaceful and maintain the existing internal order, but it's more often **violent and changes the order**. For example, the Roosevelt revolution to redistribute wealth was relatively peaceful, while the revolutions that changed the domestic orders in Germany, Japan, Spain, Russia, and China, which also happened in the 1930s for the same reasons, were much more violent.

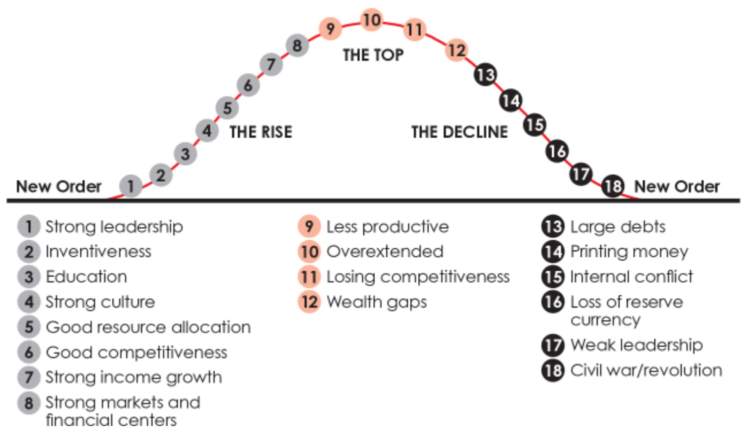
These civil wars and revolutions create what I call new internal orders. I'll explore how internal orders change in a cyclical way in Chapter 5. But the important thing to note for now is that internal orders can change without leading to a change in the world order. **It's only when the forces that produce internal disorder and instability align with an external challenge that the entire world order can change.**

Externally...

- **When there is a rising great power that is capable of challenging the existing great power and existing world order, there is a rising risk of great international conflict, especially if there is internal conflict going on within the existing great power. Typically the rising international opponent will seek to exploit this domestic weakness. This is especially risky if the rising international power has built up a comparable military.**
- **Defending oneself against foreign rivals requires great military spending, which has to occur even as domestic economic conditions are deteriorating** and the leading great power country can least afford it.
- Since there is no viable system for peacefully adjudicating international disputes, these **conflicts are typically resolved through tests of power**.
- As bolder challenges are made, **the leading empire is faced with the difficult choice of fighting or retreating**. Fighting and losing are the worst, but retreating is bad too because it allows the opposition to progress and it shows that one is weak to those other countries that are considering what side to be on.
- **Poor economic conditions cause more fighting for wealth and power, which inevitably leads to some kind of war.**
- **Wars are terribly costly. At the same time, they produce the necessary tectonic shifts that realign the world order to the new reality of wealth and power.**
- **When those holding the reserve currency and debt of the declining empire lose faith and sell them, that marks the end of its Big Cycle.**

When all of these forces line up—indebtedness, civil war/revolution at home, war abroad, and a loss of faith in the currency—a change in the world order is typically at hand.

You can see these forces summarized in their typical progression in the following chart.



I threw a lot at you in the last few pages. You might want to read them again slowly so you can see if the sequence makes sense to you. Later, we will get into a number of specific cases in greater depth and you will see the patterns of these cycles emerge, albeit not in a precise way. The fact that they occur and the reasons for them occurring are less disputable than the exact timing of their occurrences.

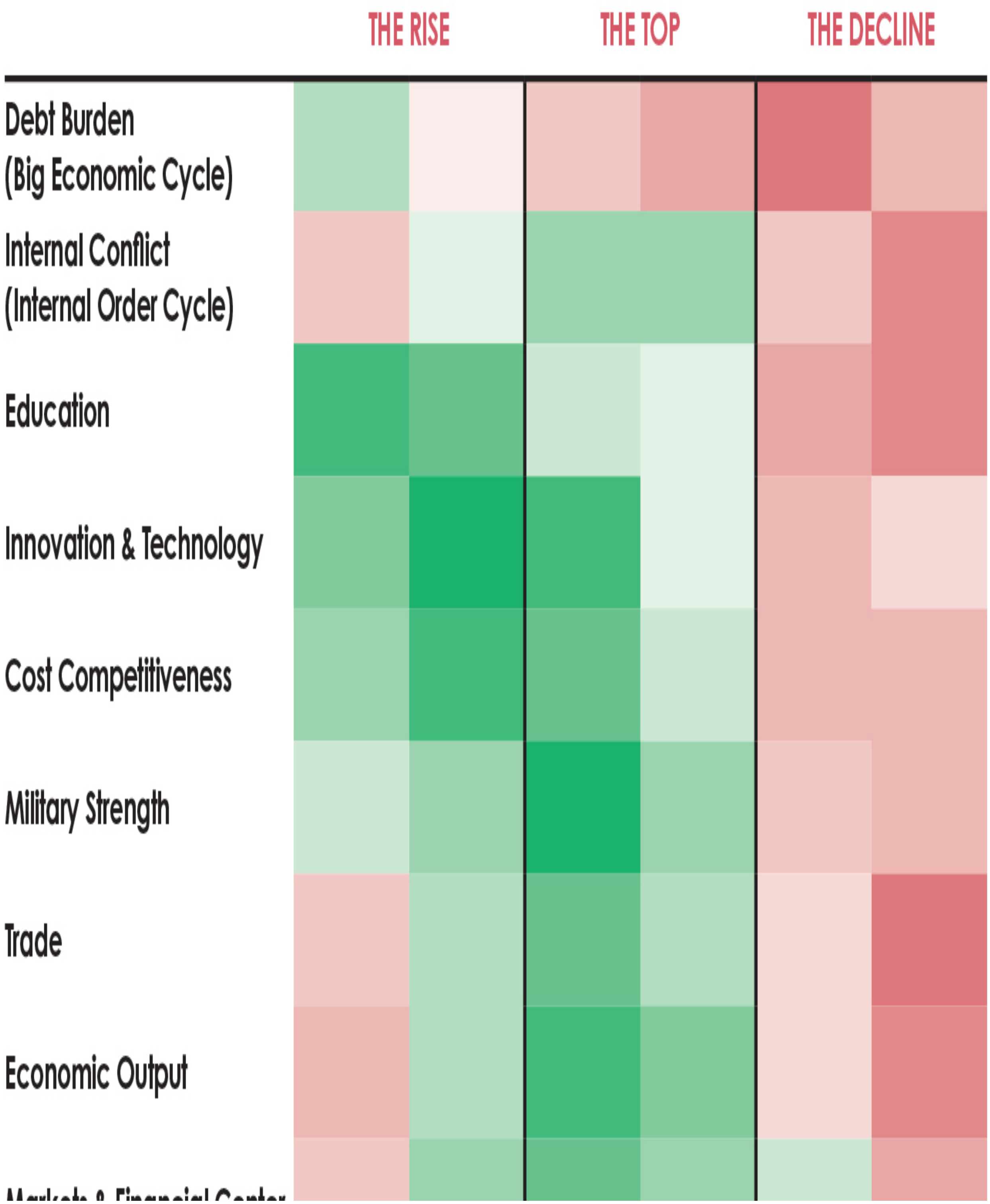
To summarize, around the upward trend of productivity gains that produce rising wealth and better living standards, there are cycles that produce prosperous periods of building in which the country is fundamentally strong because there are relatively low levels of indebtedness, relatively small wealth, values, and political gaps, people working effectively together to produce prosperity, good education and infrastructure, strong and capable leadership, and a peaceful world order that is guided by one or more dominant world powers. These are the prosperous and enjoyable periods. When they are taken to excess, which they always are, the excesses lead to depressing periods of destruction and restructuring in which the country's fundamental weaknesses of high levels of indebtedness, large wealth, values, and political gaps, different

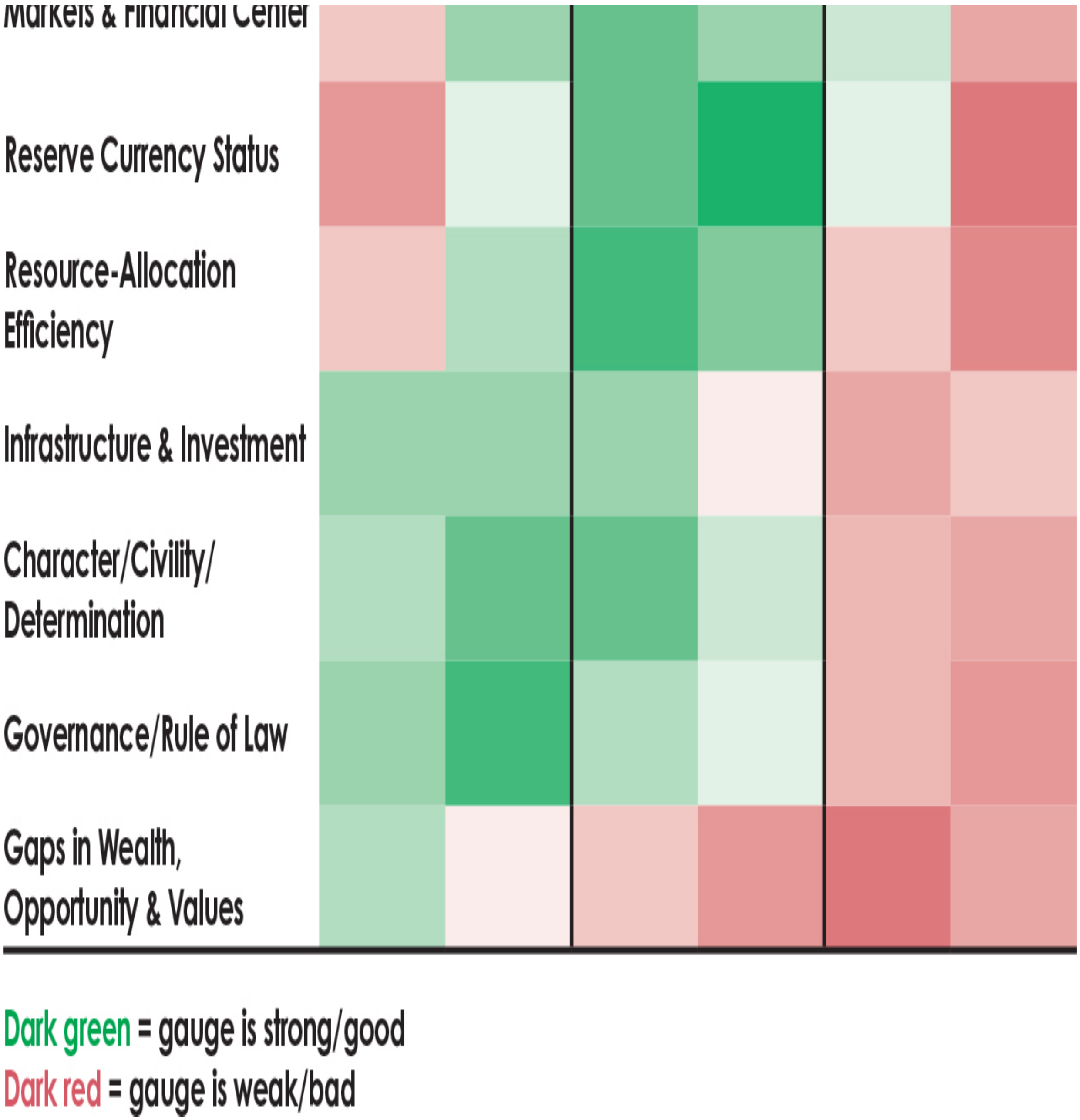
factions of people unable to work well together, poor education and infrastructure, and the struggle to maintain an overextended empire under the challenge of emerging rivals lead to a painful period of fighting, destruction, and then a restructuring that establishes a new order, setting the stage for a new period of building.

Because these steps unfold in a logical sequence of timeless and universal cause/effect relationships, it is possible to create a health index of where a country stands by looking at these measures. When the measures are strong/good, the condition of the country is strong/good and the period ahead is much more likely to be strong/good; when the ratings of these items are weak/bad, the condition of the country is weak/bad and the period ahead is much more likely to be weak/bad.

In the following table, to help paint the picture, I converted most of our measures into colors, with dark green being a very favorable reading and dark red being a very unfavorable reading. It is the average of these readings that defines which stage of the cycle a country is in, in much the same way as it is the average of the eight readings of power that I use as my measure of total power. Like those power readings, while one could reconfigure them to produce marginally different readings, they are broadly indicative in a by-and-large way. Here, I am showing this to exemplify the typical process, not to look at any specific case. I will however show specific quantitative readings for all the major countries later in this book.

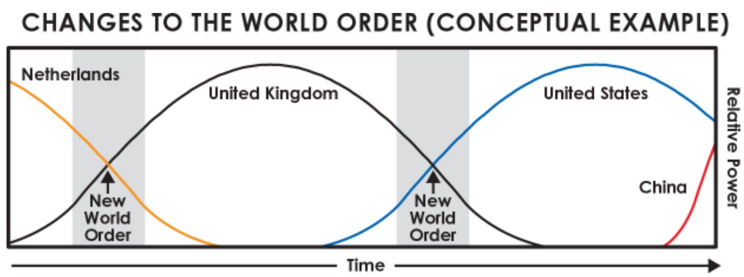
ROUGH QUANTITATIVE SCORING OF MEASURES BY STAGE IN CYCLE





[10]

Since all of these factors, both ascending and descending, tend to be mutually reinforcing, it is not a coincidence that large wealth gaps, debt crises, revolutions, wars, and changes in the world order have tended to come as a perfect storm. The Big Cycle of an empire's rise and decline looks like the following chart. The bad periods of destruction and restructuring via depression, revolution, and war, which largely tear down the old system and set the stage for the emergence of a new system, typically take about 10 to 20 years, though variations in the range can be much larger. They are depicted by the shaded areas. They are followed by more extended periods of peace and prosperity in which smart people work harmoniously together and no country wants to fight the world power because it's too strong. These peaceful periods last for about 40 to 80 years, though variations in the range can be much larger.



For example, when the Dutch Empire gave way to the British Empire and when the British Empire gave way to the US Empire, most or all of the following things happened:

End of the Old, Beginning of the New (e.g., Dutch to British)

- Debt restructuring and debt crisis
- Internal revolution (peaceful or violent) that leads to large transfers of wealth from the "haves" to the "have-nots"
- External war
- Big currency breakdown
- New domestic and world order

End of the Old, Beginning of the New (e.g., British to US)

- Debt restructuring and debt crisis
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- External war
- Big currency breakdown
- New domestic and world order

A PREVIEW OF WHERE WE ARE NOW

As previously explained, the last major period of destroying and restructuring happened in 1930–45, which led to the period of building and the new world order that began in 1945 with the creation a new global monetary system (built in 1944 in Bretton Woods, New Hampshire) and a US-dominated system of world governance (locating the United Nations in New York and the World Bank and the International Monetary Fund in Washington, DC). The new world order was the natural consequence of the US being the richest country (it then had two-thirds of the world's gold stock and gold was then money), the dominant economic power (it then accounted for about half of world production), and the strongest military (it then had a monopoly on nuclear weapons and the strongest conventional forces).

At the time of my writing, it is now 75 years later, and the major old empires, which are also the major reserve currency empires, are classically approaching the end of a long-term debt cycle when there are large debts and typical monetary policies don't work well. Politically fragmented central governments have recently tried to fill in their financial holes by giving out a lot of money that they are borrowing, while central banks have tried to help by printing a lot of money (i.e., monetizing government debt). All this is happening when there are big wealth and values gaps and a rising world power that is competing with the leading world power in trade, technology development, capital markets, and geopolitics. And on top of all this, as of this writing we have a pandemic to contend with.

Simultaneously, great human thinking, working with computer intelligence, is creating great ways of addressing these challenges. If we can all deal with each other well, we will certainly get past this difficult time and move on to a new prosperous period that will be quite different. At the same time, I am equally confident that there will be radical changes that will be traumatic for many people.

That is how the world works in a nutshell. Now I will give a more expanded description.

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[5] At this time, humanity is evolving its ways of thinking and increasing productivity in more dramatic ways than ever before—even more dramatically than the discovery and usage of the scientific method. We are

doing this through the development of artificial intelligence, which is an alternative way of thinking via an alternative brain that can make discoveries and process them into instructions of what should be done. Humanity is essentially creating an alternative species that has enormous capacity to see past patterns and process many different ideas very quickly, has little or no common sense, has trouble understanding the logic behind relationships, and doesn't have emotions. This species is simultaneously smart and stupid, helpful and dangerous. It offers great potential and needs to be well-controlled and not blindly followed.

[6] In 2008, it took two months from the crash to the printing of money; in 2020, it took just weeks.

[7] These indices are made up of a number of different statistics, some of which are directly comparable and some of which are broadly analogous or broadly indicative. In some cases, a data series that stopped at a certain point had to be spliced with a series that continued back in time. Additionally, the lines shown on the chart are 30-year moving averages of these indices, shifted so that there is no lag. I chose to use the smoothed series because the volatility of the unsmoothed series was too great to allow one to see the big movements. Going forward, I will use these very smoothed versions when looking at the very long term and much less smoothed or unsmoothed versions when looking at these developments up close because the most important developments are best captured this way.

[8] We show where key indicators were relative to their history by averaging them across the cases. The chart is shown such that a value of 1 represents the peak in that indicator relative to history and 0 represents the trough. The timeline is shown in years with 0 representing roughly when the country was at its peak (i.e., when the average across the gauges was at its peak). In the rest of this chapter, we walk through each of the stages of the archetype in more detail.

[9] "Exorbitant privilege" is a way of describing a reserve currency that was coined by French Finance Minister Valéry Giscard d'Estaing as a description of the position of the US.

[10] Acts of nature, external order, and geology are not included in cycle analysis. Readings use proxies for determinants with limited history.

CHAPTER 2

THE DETERMINANTS

In the last chapter I described the Big Cycle in a tiny nutshell. In this and the other chapters that follow in Part I, I will flesh out how I see the perpetual-motion machine working. In this chapter, I will review the most important determinants and summarize how I put them into my "model."

As the saying goes, and most people agree, "history rhymes." It "rhymes" because its most important events repeat, though never in exactly the same way. That is because, while the cause/effect relationships behind those events are timeless and universal, all things evolve and influence each other in different ways. By studying many analogous events in different times and places, their underlying causes and effects become clearer. I have learned that history's continuously evolving story transpires like a perpetual-motion machine that is driven by cause/effect relationships that both evolve and repeat over time.

To deal with the realities that are coming at me, my process is to...

- **Interact with this machine and try to understand how it works**
- **Write down my observations of its workings, along with the principles I have learned for dealing with them**
- **Backtest those principles through time**
- **Convert the principles into equations and program them into a computer that helps me with my decision making**
- **Learn from my experiences and my reflections on my experiences, so I can refine my principles**

- **Do that over and over again**

Imagine a chess player who records their criteria for making different moves in different situations, which they then encode into a computer that plays alongside them like a partner. Each player brings what they are best at to the game. The human player is more inventive, more lateral in thinking, and better able to reason, while the computer can calculate more data faster, is better able to identify patterns, and is much less emotional. This never-ending process of learning, building, using, and refining in partnership with computers describes what I do, except my game is global macro investing, not chess.

In this chapter, I will share my description of the workings of the perpetual-motion machine that drives the rises and declines of empires and their reserve currencies as I have come to understand it thus far, giving you a glimpse into how I play my game. While I'm sure my mental model is wrong and incomplete in any number of ways, it is the best one that I have now and it has proven invaluable to me. I am passing it along for you to probe and explore, take or leave, and build on as you like. My hope is that I will prompt you and others to think about the timeless and universal cause/effect relationships that drive the realities that are coming at us, and the best principles for dealing with them. By stress testing and improving this model through full-throated debate, we will get to the point where we have a largely agreed-upon template of the processes and their causes. By using that template, we can then strive to agree on which stage each country is in and what the best practices are for interacting with it, whether we are individuals taking care of our own interests or we are leaders taking care of our country's.

In the last chapter, I conveyed a very simplified description of the determinants of the evolution and cyclical rises and declines of empires—most importantly, what I believe to be the primary drivers of the Big Cycles. In this chapter, I will explain the model in much greater detail. It is based on what I saw happen repeatedly through time in the 11 leading empires of the last 500 years, the 20 most important countries of the last 100 years, and the major dynasties of China over the last 1,400 years. To be clear, I do not consider myself to be an expert historian in these cases, and these cases represent only a small percentage of all cases. I only glanced at some of the most important empires in early history, such as the Roman, Greek, Egyptian, Byzantine, Mongol, Han, Sui, Arab, and Persian empires, and I completely neglected many of the other empires that have risen and declined throughout the world in Africa, South Asia, the Pacific Islands, and precolonial North and South America. In other words, what I didn't examine was much greater than what I did examine. Still, I believe I have seen enough to develop a good mental model that applies to most countries, which has been very helpful to my efforts to understand what is going on today and which helps me to form a valuable, though hazy, picture of the future.

THE CONSTRUCTION OF MY MENTAL MODEL OF THE PERPETUAL-MOTION MACHINE

Just as we can see the arc of the human life cycle from birth to death and how one generation impacts the next, we can do the same with countries and empires. We can see how values, assets, liabilities, and experiences are handed down and how their evolutionary effects ripple out across the generations. We can tell when an empire is approaching its peak and when it is in decline.

- ***All peoples throughout history have had systems or orders for governing how they deal with each other. I call the systems within countries "internal orders," those between countries "external orders," and those that apply to the whole world "world orders." These orders affect each other and are always changing.*** Such orders have always existed at every level—within families, companies, cities, states, and countries, as well as internationally. They determine who has what powers and how decisions are made, including how wealth and political control are divided. What they are and how they run is a function of human nature, culture, and circumstances. The US now has a certain set of existing political conditions within its democratic system, but both the conditions and the system are ever-changing because of the pressure of timeless and universal forces.

The way I see it, at any moment in time there are both 1) the existing set of conditions that include the existing domestic and world orders and 2) timeless and universal forces that cause changes in these conditions.

Most people tend to pay too much attention to what exists relative to the timeless and universal forces that produce the changes. I do the opposite in my attempt to anticipate change. **Everything that has happened and everything that will happen has had and will have determinants that make it happen. If we can understand those determinants, we can understand how the machine works and anticipate what will likely be coming at us next.**

Since everything that happened and will happen was and is due to the interactions of the parts of this perpetual-motion machine, one can say that everything is predestined. I believe that, if we had a perfect model that took every cause/effect relationship into consideration, we could perfectly forecast the future —that the only thing that stands in the way is our inability to model all those cause/effect dynamics. While that might or might not be right, it tells you where I'm coming from and what I'm striving for.

Most people don't see things that way. Most people believe the future is unknowable and that destiny doesn't exist. To be clear, while having a perfect model that gives a nearly perfect picture of that predestined future would be great, I don't expect my model to come close to that. My goal is simply to have a crude yet evolving model that gives me a leg up relative to the competition and relative to the position I would be in if I didn't have the model.

To build this model, I looked at history quantitatively as well as qualitatively because 1) by measuring conditions and their changes, I can more objectively determine the cause/effect relationships behind them, develop a likely range of expectations, and systemize my decision making accordingly but 2) I can't measure everything quantitatively.

My process is to look at many cases to observe how their determinants created the effects that define them. To give a simple example, a lot of debt (a determinant) together with tight money (another determinant) will typically produce a debt crisis (the effect). Similarly, when the three big cycles that I described in the last chapter come together in a bad way (heavy indebtedness with the central bank printing a lot of money; internal conflict stemming from gaps in wealth, values, and politics; and the rise of one or more competing powers), that typically leads to the decline of an incumbent empire.

In my mental model, the relationship between the determinants and their effects in the various cases looks like this:

How the Machine Works = (f)...

	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8	Case 9	Case 10, Etc
Determinant 1	Effect	Effect	Effect	Effect	Effect	Effect	Effect	Effect	Effect	Effect
Determinant 2	Effect	Effect	Effect	Effect	Effect	Effect	Effect	Effect	Effect	Effect
Determinant 3	Effect	Effect	Effect	Effect	Effect	Effect	Effect	Effect	Effect	Effect
Determinant 4	Effect	Effect	Effect	Effect	Effect	Effect	Effect	Effect	Effect	Effect
Determinant 5	Effect	Effect	Effect	Effect	Effect	Effect	Effect	Effect	Effect	Effect
Determinant 6	Effect	Effect	Effect	Effect	Effect	Effect	Effect	Effect	Effect	Effect
Determinant 7	Effect	Effect	Effect	Effect	Effect	Effect	Effect	Effect	Effect	Effect
Determinant 8	Effect	Effect	Effect	Effect	Effect	Effect	Effect	Effect	Effect	Effect
Determinant 9	Effect	Effect	Effect	Effect	Effect	Effect	Effect	Effect	Effect	Effect
Determinant 10	Effect	Effect	Effect	Effect	Effect	Effect	Effect	Effect	Effect	Effect
Etc										

Determinants lead to effects that become subsequent determinants that produce subsequent effects that become linked together in many cases. So we can look at each case and see what happened (the effect) and what made it happen (its determinants). Or we can look at the determinants to see the effects they had to make up the various cases. The determinants are both what exists and the energy that produces changes; like energy and

matter, at the end of the day they're the same. They create new circumstances and new determinants that create the next changes.

That is how I quite literally try to model the perpetual-motion machine.

THE 3, THE 5, THE 8, AND THE 18 DETERMINANTS

In the last chapter, I introduced you to what I believe are the three big cycles and the eight most important determinants of the rises and declines of empires and their currencies. **Because thinking about all of these determinants and their interactions is complex, I suggest that you keep the three big cycles in mind as the most important things to watch: 1) the cycle of good and bad finances (e.g., the capital markets cycle), 2) the cycle of internal order and disorder (due to degrees of cooperation and fighting over wealth and power largely caused by wealth and values gaps), and 3) the cycle of external order and disorder (due to the degrees of the competitiveness of existing powers in fighting for wealth and power).** I hope you will join me in trying to understand these three cycles and know where countries are in them. History and logic show that when a country simultaneously has all three in their good phases it is strong and rising, and when all three are in their bad phases it is weak and declining.

If I were to add two more determinants to keep in mind, they would be 4) the pace of innovation and technological development to solve problems and make improvements and 5) acts of nature, most importantly droughts, floods, and diseases. That is because innovation and technological advances can solve most problems and further evolution, and acts of nature such as droughts, floods, and diseases have had enormous impacts throughout history. These are the five most important forces, which I call the "Big Five," so when they are moving in the same direction—toward improving or toward worsening—most everything else follows.

I also introduced the eight powers that I could measure that seemed to be the most important. You can review them along with the big cycles in the following list. These indicators both reflect and drive the upswings and downswings. The chart of the archetypical rise and decline by factor in Chapter 1 showed the average readings of these along the path of the archetypical cycle. Each of these types of power rising and declining in cycles comes together with the other cycles to make the one Big Cycle of the empire's rise and decline.

And then there are the other determinants such as geology/geography, rule of law, and infrastructure that matter too. The whole list of 18 factors[1] **included in my model is shown on the next page.** You can also read a detailed description of all 18 at the end of Chapter 14.

THE THREE BIG CYCLES

Healthy — Big Debt/Money/Capital Markets/Economic Cycle — Unhealthy

Order — Big Cycle of Internal Order and Disorder — Disorder

Peace — Big Cycle of External Order and Disorder — War

OTHER KEY DETERMINANTS (EIGHT KEY MEASURES OF POWER)

High — Education — Low

High — Innovation & Technology — Low

Strong — Cost Competitiveness — Weak

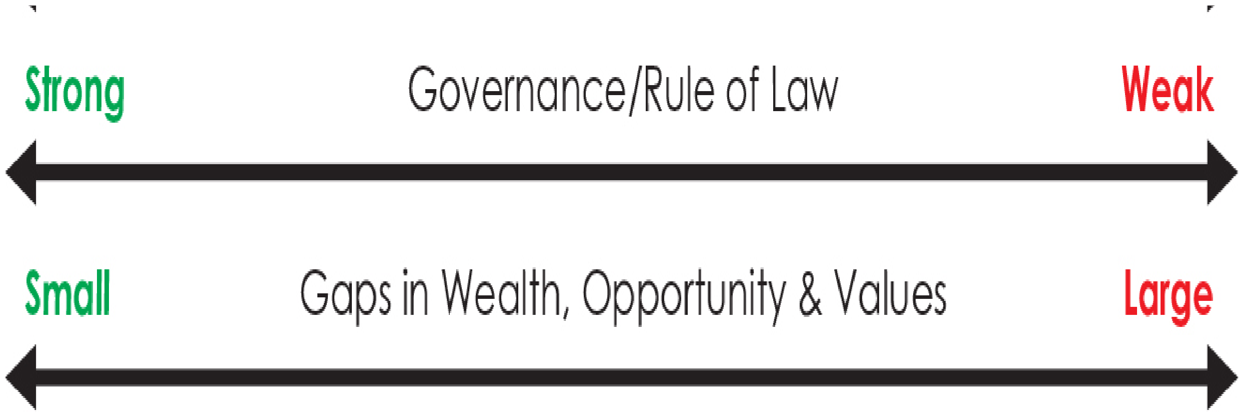
Strong — Military Strength — Weak

Favorable — Trade — Unfavorable

High	Economic Output	Low
Strong	Markets and Financial Center	Weak
Strong	Reserve Currency Status	Weak

ADDITIONAL DETERMINANTS

Favorable	Geology	Unfavorable
Efficient	Resource-Allocation Efficiency	Poor
Beneficial	Acts of Nature	Disruptive
High	Infrastructure and Investment	Low
Strong	Character/Civility/Determination	Weak



I find measuring and weighing all these things in my head, plus all of the other important dynamics at play, to be impossible. That is why I analyze them with the aid of a computer. I will share my analysis for the top 11 countries in the appendix after Chapter 14: The Future. I also provide detail on some components for the top 20 countries at economicprinciples.org.

Though none of these determinants is determinative on its own, I think you will find that when considered together they paint a pretty clear picture of which part of its life cycle a country is in and the direction it is headed in. For the fun of it you might want to go through a little exercise of ticking off where each of those measures is for each country you're interested in. Rank each country on a 1–10 scale for each attribute, beginning with 10 on the far left and 1 on the far right. If you add all these rankings up, the higher the number, the greater the probability of the country rising on a relative basis. The lower the number, the more likely it will fall. Take a moment to calculate where the United States is, where China is, where Italy is, where Brazil is, and so on.

Because I systematize as much as I can, I push to quantify whatever possible into a decision-making system. So, with the help of my team, I have developed gauges that look at things like internal and external conflict, political gaps, etc., to help me better understand where countries are in their cycles. Some of the less key determinants are aggregated as subcomponents of the key determinants.

While I measure and describe the determinants discretely, they are not separate. They interact with each other and blend together, typically reinforcing each other and the whole cycle's rise and fall. For example, stronger education leads to stronger technological innovation, which leads to increased productivity and increased shares of trade, greater wealth, more military power, and eventually the establishment of a reserve currency. Further, having strong leaders, a population that is well-educated and civil with each other, a system that efficiently allocates capital and other resources, access to natural resources, and favorable geography all help a lot, and when they decline, they tend to decline together.

Of course, not all of the indicators can be expressed in numbers and equations; things like human nature and the power dynamics that affect behaviors and outcomes are better described in words. I call these things dynamics. The following table shows a list of other main dynamics that I keep in my head while trying to evaluate where nations are and what is likely to come next.

DYNAMICS TO PAY ATTENTION TO

Country	Self-Interest	Individual
Important	Desire to Gain Wealth and Power	Not important
Extensive	Learning from History	Limited
Strong	Multigenerational Psychological Cycle	Decadent
Long-Term	Time Frame of Decision Making	Short-Term
Competent	Leadership	Weak
Open	Openness to Global Thinking	Closed
Productive	Culture	Unproductive
Cooperative	Class Relationships	Divisive

That's a lot. It is both too little and too much—too little to do full justice to the subjects (which have all been the focus of whole books and doctoral theses) and too much to process and digest. I have tried to cram a small portion of what I've learned about them into the summaries that follow. Fuller accounts of a number of these dynamics are contained in an addendum immediately following this chapter if you're interested in diving more deeply into any of them. **While I'm sure that what follows doesn't include all the most important determinants, I also know that the ones I'm highlighting here and in the following chapters represent the most important influences that have repeatedly driven the most important events throughout history.** Of course, I look forward to being corrected and guided by others to make my descriptions more complete.

EXPLORING THE DETERMINANTS AND DYNAMICS

I find that knowing the different circumstances countries face, as well as the strategies and group dynamics they bring to facing these circumstances, helps me understand what moves are likely to come next and how these moves will impact the key determinants. I will explain a bit more about how these look to me, which I will do by examining the machine from the top down.

As I see it, the determinants and dynamics that drive events fall into two types:

1. **Inherited Determinants:** They include a country's geography, geology, and acts of nature such as weather and diseases.
2. **Human Capital Determinants:** They are the ways people are with themselves and each other. They are driven by human nature and different cultures (which differentiate their approaches).

These two big categories contain within them many important factors, ranging from qualities that are highly specific to countries (like their geography) to those that are universal (like the human tendency to favor short-term gratification over long-term goals), and they can be discerned at every level, whether in individuals, cities, countries, or empires.

INHERITED DETERMINANTS

By inherited determinants of a country's well-being I mean its geography, geology, genealogy, and acts of nature. These are big drivers of each country's and each people's stories. For example, you can't understand the success of the United States without recognizing that it is separated from European and Asian powers by two oceans and blessed with most of the minerals, metals, and other natural resources it needs to be prosperous and self-sufficient, including the topsoil, water, and temperate climate that allows it to produce most of its own food. These factors enabled it to be largely isolationist until a little more than a century ago while investing in education, infrastructure, and innovation in ways that made it strong. Let's briefly review those.

1. Geography. Where a country is, what's around it, and what its terrain is like are all important determinants. For example, the geographies of the United States and China—both with large expanses of land bounded by large natural barriers of water and mountains—created the inclination for them to be one big whole, increasing the commonalities of their people (e.g., shared language, government, culture, etc.). In contrast, the geography of Europe (i.e., having many more natural boundaries within it) reinforced its divisions into different states/countries, leading to fewer commonalities among its people (e.g., different languages, governments, cultures, etc.).

2. Geology. The natural resources on and under a country's surface are critically important, but geology should not be overvalued relative to human capital. History shows us that every commodity has declined in value (in inflation-adjusted terms) with big up and down cycles around that downtrend. That is because inventiveness changes what is in demand—e.g., new energy sources replacing old ones, fiber-optic cable replacing copper wiring, etc.—and natural resources are depleted over time. Many Middle Eastern countries' wealth, power, and relevance to the rest of the world rose with the importance of petroleum and may fall as the world turns away from fossil fuels. The most vulnerable position to be in is having a high reliance on one or a few commodities because they are highly cyclical and sometimes lose value altogether.

3. Acts of Nature. Acts of nature come in many forms, such as epidemic diseases, floods, and droughts. Throughout history they have affected the well-being of countries and the course of their evolution even more than wars and depressions. The Black Death killed an estimated 75–200 million people in the years around 1350, and smallpox killed more than 300 million people in the 20th century, which is more than double the number that died in its wars. Droughts and floods have caused massive famines and loss of life. Such catastrophes tend to come along unexpectedly and act as stress tests, revealing the underlying strengths and weaknesses of societies.

4. Genealogy. Regarding genealogy, I'm no expert on genetics, so I have little to offer other than to say that all people come into this world with inherited genes that affect how they behave to some extent, so it is logical that the genetic makeup of a country's population should have some effect on its outcomes. Having said that, I should point out that most of the evidence I have seen indicates that only a small percentage (15 percent or less) of the variations in the behaviors of people between populations could potentially be explained by genetic differences, so genetics seems to be a relatively minor determinant in relation to the other influences I am mentioning.

HUMAN CAPITAL DETERMINANTS

● ***While the inherited assets and liabilities of a country are very important, history has shown that the way people are with themselves and others is the most important determinant.*** By that I mean whether they hold themselves to high standards of behavior, whether they are self-disciplined, and whether they are civil with others in order to be productive members of their societies is most important. These qualities plus flexibility and resilience (i.e., the capacity to adapt to both "bad" and "good" things) allows people to minimize setbacks and maximize opportunities. Character, common sense, creativity, and consideration in most people make for a productive society.

Because capital is an income-producing asset, human capital can be defined as a human who generates income. ● ***When humans have the capacity to produce more revenue than they expend, there is good human capital and self-sufficiency.*** I call this "self-sufficient plus," which is what all people, companies, and countries should strive for in order for them individually and collectively to be strong financially. The likelihood of having good human capital and being "self-sufficient plus" is improved through quality education, a culture of hard work and cooperation, training, etc. Societies that don't have good human capital are either drawing down their resources or getting deeper into debt they won't be able to pay back (i.e., they're headed for trouble).

- ***While many countries have natural resources that they are able to draw upon, human capital is the most sustainable capital because inherited assets that are drawn down eventually disappear, whereas human capital can exist forever.***

Human capital is why people who come up with new ideas and build them out (e.g., entrepreneurs) beat giants with vast resources (just look at Elon Musk and his startup Tesla, which rivals resource-rich General Motors, Ford, and Chrysler; or Steve Jobs and Bill Gates, whose computer startups surpassed giants like IBM; and so on). Great human capital allows people to overcome their weaknesses and identify and capitalize on their opportunities. It is the attribute that has allowed small countries like the Netherlands, England, Switzerland, and Singapore to achieve great wealth and (in some cases) power.

THE MOST IMPORTANT HUMAN NATURE DETERMINANTS

Across societies and throughout time, people share the same human nature, which makes them much more alike than different. People behave similarly when faced with similar circumstances, driving the Big Cycles.

5. Self-Interest. Self-interest, especially self-survival, is the most powerful motivator for most people, organizations, and governments. However, which self-interest—e.g., the individual's, the family's, the country's, etc. —matters most is a critical determinant of the society's success. See the addendum that follows this chapter to learn more.

6. The Drive to Gain and Keep Wealth and Power. The quest for wealth and power is a powerful motivator of individuals, families, companies, states, and countries, though that's not totally true because different individuals, families, companies, states, and countries value wealth and power differently relative to other things. For some, wealth and power are not nearly as important as other things that life has to offer. But for most, especially those who become the most wealthy and powerful, the pursuit of wealth and power is all-consuming. **To be successful over the long run, a country must earn an amount that is at least equal to what it spends. Those that earn and spend modestly and have a surplus are more sustainably successful than those that earn and spend a lot more and have deficits. History shows that when an individual, organization, country, or empire spends more than what it earns, misery and turbulence are ahead.** For more, see the addendum.

7. Capital Markets. The ability to save and obtain buying power through one's capital markets is essential to a country's well-being. For that reason, how well they are developed is an important determinant of a country's success.

8. The Ability to Learn from History. Most people don't have this, which is an impediment, though it varies by society. For example, the Chinese are excellent at this. Learning from one's own experiences is not adequate because, as explained earlier, many of the most important lessons don't come in one's lifetime. In fact, many encounters in the future will be more opposite than similar to what one encountered before in life. Since the peace/boom period at the beginning of the cycle is opposite to the war/bust period at its end, the periods people face later in their lives are more likely to be more opposite than similar to the ones they encountered earlier in their lives. More specifically, in my opinion, if you don't understand what happened since at least 1900 and how that rhymes with what is happening now, there is a high likelihood that you will find yourself in trouble.

9. The Big Multigenerational Psychological Cycle. Different generations think differently because of their different experiences, which leads them to make their decisions differently, which affects what happens to them and to subsequent generations. This is reflected in the adage "from shirtsleeves to shirtsleeves in three generations." Three generations is also roughly the length of time of a typical long-term debt cycle. However, history shows that when these cycles are handled well—i.e., strong human capital is maintained over many generations—they can go on for many generations. This multigenerational cycle takes place over several stages that are described in the addendum to this chapter.

10. Favoring Short-Term Gratification over Long-Term Well-Being. This is another differentiator of people's and society's successes. Those who favor long-term well-being over short-term well-being tend to do better. The human propensity to choose short-term enjoyment over long-term well-being naturally exaggerates the highs and lows of the cycle because it pulls the good times forward at the expense of the future. That happens in many harmful ways, most classically by creating the debt boom and bust cycle. Governments are especially vulnerable to this because of how the political dynamic works. More specifically, a) politicians are motivated to prioritize the near term over the long term, b) they don't like to face limitations and difficult financial trade-offs (e.g., choosing whether to spend on the military for defense or to spend on social programs), and c) it is politically threatening to take money away from people by taxing them. This leads to a host of political and other problems.

11. Humanity's Inventiveness. Humanity's greatest power is what drives human evolution, which is manifest in increased productivity and higher living standards. Unlike other species, humans have a unique capacity to learn and evolve their intellectual understanding; plus, they invent things that materially change their circumstances, producing advances in everything. These advances produce the upward trending corkscrew I described in Chapter 1. To imagine what it would be like if humankind didn't have this ability, look at other species. Without humanity's unique ability to invent, our lives would be pretty much the same generation after generation. Because there would be far fewer new things, there would be fewer surprises and advances. In fact, some periods of human history were very much like that. However, it varies greatly from one society to another. For more, see the addendum to this chapter.

DETERMINANTS SHAPED BY CULTURE

12. Culture. As the saying goes, "culture is destiny." Cultural differences —differences in how people believe they should be with each other— matter enormously. All societies create cultures based on how they think reality works, and they all provide principles for guiding how people should deal with reality, and most importantly how they should deal with each other. Culture drives the formal and informal ways each society works. Individuals known and unknown, such as Jesus, Confucius, Mohammed, Buddha, Mahavira, Guru Nanak, Plato, Socrates, Marx, and many others, have conveyed approaches to life that were captured in books such as the Hebrew Bible and the New Testament, the Talmud, the Quran, the I Ching, the Five Books and Four Classics, the Analects, the Upanishads, the Bhagavad Gita, the Brama Sutras, *Meditations*, *Republic*, *Metaphysics*, *The Wealth of Nation*s, and *Das Kapital*. These, together with the discoveries of scientists, artists, politicians, diplomats, investors, psychologists, etc., all encountering their realities and adapting to them in their own ways, are what determines a people's culture.

13. Openness to Global Thinking. This is a good leading indicator of strength because isolated entities tend to miss out on the world's best practices, which weakens them, while learning about the best the world has to offer helps people be their best. Isolation also prevents them from benefiting from the challenge of facing off against the world's best competitors. History is littered with cases in which countries were isolated, sometimes because they chose to cut themselves off to protect their cultures (e.g., the late Tang, late Ming, and early PRC periods in China, and the Edo period in Japan) and sometimes because of circumstances like natural disasters and internal fighting. Both reasons lead them to fall behind in their technology, with terrible consequences. In fact, it is one of the most common reasons for empires and dynasties failing.

14. Leadership. Everything I've mentioned so far is influenced by the people in leadership positions. Life is like a game of chess or the Chinese board game Go, in which every move helps determine the outcome and some players know how to make better moves than others. In the future, more and more of those moves will be made with the aid of computers, but for now they are still made by people. In reading history you see over and over how its course has been changed by the uniqueness—sometimes excellence, sometimes terribleness—of a relatively few people in key areas such as the government, the sciences, finance and commerce, the arts, and so on. In each generation, roughly a few hundred people made all the difference. Studying what these key people in these key roles were like, what they did in different situations, and the consequences of what they did helps us understand how this perpetual-motion machine works.

DETERMINANTS SHAPED BY HOW INDIVIDUALS AND GROUPS INTERACT WITH EACH OTHER

15. Wealth Gaps. Large and widening wealth gaps tend to lead to periods of greater conflict, especially when economic conditions become bad and people are fighting over a shrinking pie.

16. Values Gaps. While wealth matters, it is not the only thing that people fight over. Values (e.g., in religions and ideologies) matter a lot too. History shows us that widening values gaps, especially during periods of economic stress, have tended to lead to periods of greater conflict, while shrinking values gaps tend to lead to periods of greater harmony. This dynamic is driven by the fact that people tend to coalesce into tribes that are bound together (often informally) by the magnetism of their members' commonalities. Naturally, such tribes operate with each other in ways that are consistent with their shared values. When under stress, people with greater values gaps also prove to have greater conflict. They frequently demonize members of other tribes rather than recognizing that those other tribes, like themselves, are simply doing what is in their self-interest in the best ways they know how.

17. Class Struggles. ***In all countries throughout time, though to varying degrees, people are sorted into "classes," either because they choose to be with people like themselves or because others assign them to a class.*** Power is usually shared among three or four classes who in aggregate make up only a small percentage of the population. The classes people are in typically determine who their friends and allies are and who their enemies are. They are sorted into these classes whether they like it or not because people stereotype. While rich and poor are the most common class distinctions, there are many other important ones, such as race, ethnicity, religion, gender, lifestyle, location (e.g., urban versus rural), and politics (right versus left). Early in the Big Cycle, when times are good, there is generally more harmony among the classes, and when things are bad toward the end, there is more fighting. **Class warfare has profound effects on the internal order**, which I will explore in Chapter 5. For more on this determinant, see the addendum to this chapter.

18. The Political Left/Right Cycle. In all societies there are swings between the political left and the political right that determine how wealth and power are distributed. The swings are sometimes peaceful and sometimes violent and are always important to understand. Typically, the big cycle in the capital markets, along with cycles in wealth, values, and class divisions, drive the political left/right cycle because these create the motivations for political change. When capital markets and economies are booming, wealth gaps typically increase. While some societies succeed at striking a relatively sensible and steady balance between left and right, more frequently we see cyclical swings between norms. These swings typically occur throughout empires' rises and declines, in roughly 10-year cycles. The big economic crises that mark the end of the Big Cycle often herald revolutions. For more, see the addendum to this chapter.

19. The Prisoner's Dilemma Must Be Solved for Peace to Exist. The prisoner's dilemma is a concept from game theory that explains why, even when the best thing for two parties to do is to cooperate, the logical thing for each to do is to kill the other first. That is because survival is of paramount importance, and while you don't know for certain if your opponent will attack you, you do know that it is in their interest to defeat you before you defeat them. It's for this reason that deadly wars are best avoided by both sides establishing mutually assured protections against existential harms. Exchanging benefits and creating interdependencies that would be intolerable to lose further reduces the risk of conflict.

20. Whether There Are Win-Win Relationships or Lose-Lose Relationships. It is up to both parties to choose what kind of relationship they have. That is true at all levels of relationships, from individuals up to countries. Most fundamentally, parties can choose whether to have a cooperative win-win relationship or a threatening lose-lose relationship—i.e., to be allies or enemies—though actions by both determine what type of relationship they will have and whether it will work well. To be clear, win-win relationships can exist between competitors as long as each side does not pose an existential risk to the other (see the prisoner's dilemma). All that's required is that they know and respect each other's existential red lines. Parties in win-win relationships can have tough negotiations, competing like two friendly merchants in a bazaar or two teams at the Olympics. Having win-win relationships is obviously better than having lose-lose relationships, but sometimes there are irreconcilable differences that must be fought over because they can't be negotiated away.

21. The Big Balance of Power Cycle That Drives the Big Peace/War Cycle Both Within Countries and Between Countries. The balance of power dynamic is the timeless and universal dynamic of allies and enemies working to gain wealth and power. It drives virtually all struggles for power, from office politics to local politics, and from national politics to geopolitics. In some cultures this game is played a bit differently than in other cultures—e.g., in Western society it is played more like chess while in Asian societies it is played more like Go—though the objective is the same: to dominate the other side. It has always existed and still exists everywhere and appears to transpire along a consistent series of steps, which I describe in more detail when discussing the internal order in Chapter 5 (even though these same forces apply equally to internal and external power struggles). For a more complete explanation of how the balance of power cycle works, see the addendum to this chapter.

22. Military Strength and the Peace/War Cycle. History shows us that military strength—whether one's own or another's via alliances—is a critical determinant of outcomes, sometimes because the mere threat of force is power and sometimes because the use of force is required. Military strength is readily observable and measurable, but it can also be qualitatively assessed. Internationally, military strength is especially important because there is no effective international judicial and enforcement system. This leads to countries needing to fight to test their relative powers and a cycle of war and peace that I will explain when discussing the external order cycle in Chapter 6.

ALL THESE THINGS COME TOGETHER TO DETERMINE INTERNAL ORDERS, EXTERNAL ORDERS, AND HOW THEY CHANGE

I have repeatedly seen all of these determine the levels and the rises and declines in wealth and power of all peoples. I have seen them together create the circumstances the people of a country and/or its leaders face and how they face them. They drive the internal and world orders and changes in them.

- ***Like everything else, internal orders and world orders are constantly evolving and moving circumstances forward through time, as existing circumstances interact with each other and the forces that act on them to produce new circumstances.***

Evolution occurs because of logical cause/effect relationships in which existing conditions and determinants propel changes that create a new set of conditions and determinants that propel the next changes and so on, like matter and energy interacting in a perpetual-motion machine. Because a given set of circumstances creates a limited set of possibilities, by properly identifying the circumstances and understanding the cause/effect relationships, one can improve one's understanding of the possibilities of what will come next and how to make wise decisions.

For example, all countries now have their existing way of choosing new leaders. In the US, the president is chosen both by the voters in accordance with the democratic system laid out in the Constitution and by how people choose to operate within the system. How well this works depends on how effective both are, which is a result of prior determinants, such as how effectively those in previous generations dealt with and modified the system. The people now interacting with the system are different from those of previous generations, who were shaped by different circumstances, so we should expect different outcomes based on how people today are different.

Not having the historical perspective to recognize those differences is a handicap. Once we see them and understand how the perpetual-motion machine works, we can see how different systems such as communism, fascism, autocracies, democracies, and evolutionary descendants and hybrids of these, such as state capitalism in China, evolve through time. Seeing this, we can imagine how new forms of internal orders to divide wealth and allocate government political power may evolve and affect our lives, based on how people choose to be with each other and how human nature enters into their choices.

Now that I have described my mental model of how the world works rather superficially, in the rest of Part I, I will focus on the most important determinants—namely the three big cycles of debt and capital markets, internal order, and external order—in more detail. I will also describe what I believe all this means for investing. Before you go on to that, you might want to look over the addendum to this chapter, which fleshes out some of the determinants that I only briefly covered in this chapter. On the other hand, if you're feeling bogged down, you can skip it. That's why I made it an addendum.

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[1] I want to clarify the difference between a determinant and a cycle because sometimes I will use these terms in ways that might not be clear. A determinant is a factor (e.g., the supply of money) while a cycle is a series of self-reinforcing determinants that lead to events transpiring in a certain way—e.g., central banks making lots of money and credit available eventually leads to strong economic growth, inflation, and bubbles, which then prompt central banks to reduce the money supply, which produces market and economic downturns, which then lead the central banks to increase the supply of money to… etc. So, cycles themselves are determinants that are a collection of complementary forces that interact in a process to produce the same results again and again through time.

CHAPTER 2

DETERMINANTS ADDENDUM

In Chapter 2 I introduced some concepts that I thought might be worth explaining in greater depth but didn't want to include in the body of the chapter because these explorations could be too much, so I decided to include them here as an addendum in case you are interested in exploring them further. To help you make the connection I refer to each determinant or dynamic by title and number from Chapter 2.

5. Self-Interest. While self-interest is the primary motivator for most people, organizations, and governments, the question of which "self" is most important—is it the individual, the family, the tribe (i.e., community), the state, the country, the empire, humankind, all living things, the universe? The following diagram shows the possible units. The ones on the top are more encompassing and the ones on the bottom are the less consolidated. **What are most people in your society, and what are you, willing to die for?**

THE UNIVERSE

↕

ALL LIVING THINGS

↕

HUMANKIND

↕

EMPIRE

↕

COUNTRY

↕

STATE

↕

TRIBE
(i.e., community)

↕

FAMILY

↑

INDIVIDUAL

The "self" that people are most attached to is the one they will do the most to protect and this will drive their behaviors. For example, when people are willing to die for their country, their country will be more likely to be protected than if the individual self is more important, in which case individuals will run from deadly combat. Within countries one might see tribes be much more important than countries, which would lead to an entirely different dynamic than if the opposite were true. That is why **I find this dynamic worth keeping an eye on**, especially in conflicts.

In looking at history across countries **I saw changes in the primary unit that most people and societies optimized for**. For example, before around 1650[1] tribes and states were more important than countries. History shows that the groupings that people collect in and that are the most important to them evolve. Gatherings of individuals and families make up a tribe (i.e., a community); gatherings of tribes (or communities) make up a state (e.g., the state of Georgia); gatherings of states make up a country (e.g., the United States); gatherings of states or countries that are under unified control make up an empire (e.g., the British Empire). Sometimes smaller groupings coalesce into bigger ones, changing boundaries in the process. For example, over the last 150 years in Europe, states coalesced into nations, many of which have coalesced into the European Union. And sometimes they break up into smaller units. For example, the Soviet Union broke up into its constituent countries, and some Middle Eastern countries have broken up into warring tribes.

Over the last few years, the world has been moving from being more globalist to being more nationalist. At the same time, the United States appears to be losing its cohesion as people's views about how they should be with each other are becoming more divergent. These divergences are leading people to migrate to the states that align with their preferences, causing those states to be more relevant individually than as parts of a unified whole. History and logic show us that these changes in domestic and international orders are typically accompanied by conflicts because there is a lot of disagreement about how they should work—e.g., what states' rights are relative to national rights. Because most people haven't seen such changes before, they fail to recognize them for what they are. They are important to stay on top of because they show the changing locus of control, which typically signals a change in one's rights and obligations.

Think about it. What are you seeing happen? Are you seeing coalescing or dissolving? From what level to what other level? What implications do these changes have for you and where you want to be?

6. The Drive to Gain and Keep Wealth and Power. For the purposes of discussing the big cycles in later chapters, it's worth defining wealth a bit more specifically and looking at its impact on countries that have it or lack it. I believe the following to be by and large true:

Wealth = Buying Power. Without getting too nuanced, let's call wealth buying power to distinguish it from money and credit. That distinction is important because the value of money and credit changes. For example, when a lot of money and credit are created, they go down in value, so having more money won't necessarily give one more wealth or buying power.

Real Wealth ≠ Financial Wealth. Real wealth is what people buy because they want to have and use it, such as a house, car, streaming video service, etc. Real wealth has intrinsic value. Financial wealth consists of financial assets that are held to a) receive an ongoing income in the future and/or b) be sold in the future to get money to buy the real assets people will want. Financial wealth has no intrinsic value.

Making Wealth = Being Productive. Over the long run the wealth and buying power you have will be a function of how much you produce. That is because real wealth doesn't last long and neither do inheritances. That is why being continuously productive is so important. If you look at societies that expropriated the wealth of the rich and tried to live off it and weren't productive (e.g., Russia after the revolutions of 1917), you will see that it didn't take them long to become poor. The less productive a society, the less wealthy and hence the less powerful. By the way, spending money on investment and infrastructure rather than on consumption tends to lead to greater productivity, so investment is a good leading indicator of prosperity.

Wealth = Power. That is because if one has enough wealth one can buy most anything—physical property, the work and loyalty of others, education, healthcare, influential powers of all sorts (political, military, etc.), and so on. Through time and across countries, history has shown that there is a symbiotic relationship between those who have wealth and those who have political power, and that the type of deal they have between them determines the ruling order. That ruling order continues until the rulers are overthrown by others who grab the wealth and power for themselves.

Wealth and power are mutually supportive. For example, in 1717 the British East India Company effectively brought together financial capital, people with commercial capabilities, and people with military capabilities to force India's Mughal emperor to trade with them, which was the first step toward the British colonization of India, the fall of the Mughal Empire in the 18th century, and then its complete failure in the 19th century, when the British exiled the emperor and executed his children after the 1857 Indian Rebellion. The British did these things because they had the wealth and power to do them in pursuit of more wealth and power.

Wealth Decline = Power Decline. There isn't an individual, organization, country, or empire that hasn't failed when it lost its buying power. ***To be successful one must earn an amount that is at least equal to the amount one spends.*** Those who spend modestly and have a surplus are more sustainably successful than those who earn a lot more and have deficits. History shows that when an individual, organization, country, or empire spends more than what they earn, misery and turbulence are ahead. History also shows that countries that have higher percentages of people who are self-sufficient tend to be more socially, politically, and economically stable.

9. The Big Multigenerational Psychological Cycle. The rises and declines of countries correspond to these psychological and economic cycles in the following ways and stages. Because these stages are so useful in understanding the behavior of a country's people and leaders, I am always trying to assess what stages different countries are in.

Stage 1: People and Their Countries Are Poor and They Think of Themselves as Poor. In this stage, most people have very low incomes and subsistence lifestyles. As a result they don't waste money because they value it a lot, and they don't have much debt because nobody wants to lend to them. Some people have potential and some do not, but in most cases their poverty and lack of resources prevent them from gaining the education and other capabilities that would allow them to pull themselves up. One's inherited circumstances and approach to life are the biggest determinants of who emerges richer from this stage and who does not.

How fast countries evolve through this stage depends on their cultures and their abilities. **I call countries in this stage "early-stage emerging countries."** Those that advance typically work hard and gradually accumulate more money than they need to survive, which they save because they worry about not having enough in the future. The evolution through this stage to the next typically takes about a generation. Starting about 40 years ago until about 10 to 15 years ago the "Asian Tigers" of Hong Kong, Singapore, Taiwan, and South Korea and then China were examples of economies in this stage.

Stage 2: People and Their Countries Are Rich but Still Think of Themselves as Poor. Because people who grew up with financial insecurity typically don't lose their financial cautiousness, people in this stage still work hard, sell a lot to foreigners, have pegged exchange rates, save a lot, and invest efficiently in real assets like real estate, gold, and local bank deposits, and in bonds of the reserve currency countries. Because they have a lot more money, they can and do invest in the things that make them more productive—e.g., human capital development, infrastructure, research and development, etc. This generation of parents wants to educate their children well and get them to work hard to be successful. They also improve their resource-allocation systems, including their capital markets and their legal systems. This is the most productive phase of the cycle.

Countries in this stage experience rapidly rising income growth and rapidly rising productivity growth at the same time. The productivity growth means two things: 1) inflation is not a problem and 2) the country can become more competitive. During this stage, debts typically do not rise significantly relative to incomes and sometimes they decline. This is a very healthy period and a terrific time to invest in a country if it has adequate property rights protections.

You can tell countries in this stage from those in the first stage because they have gleaming new cities next to old ones, high savings rates, rapidly rising incomes, and, typically, rising foreign exchange reserves. **I call countries in this stage "late-stage emerging countries."** While countries of all sizes can go through this stage, when big countries go through it, they are typically emerging into great world powers.

Stage 3: People and Their Countries Are Rich and Think of Themselves as Rich. At this stage, people's incomes are high, so labor becomes more expensive. But their prior investments in infrastructure, capital goods, and research and development are still paying off by producing productivity gains that sustain their high living standards. Priorities shift from an emphasis on working and saving in order to protect oneself from bad times, to savoring the finer things in life. People become more comfortable spending more. Arts and sciences typically flourish. This change in the prevailing psychology is reinforced as a new generation of people who did not experience the bad times become an increasingly large percentage of the population. Signs of this change in mindset are reflected in statistics that show reduced work hours (e.g., typically there is a reduction in the workweek from six days to five) and big increases in expenditures on leisure and luxury goods relative to necessities. At their best, these periods are early- and mid-stage "Renaissance periods."

Large countries in this stage almost always become world economic and military powers.[2] Typically, they develop their militaries in order to project and protect their global interests. Prior to the mid-20th century, large countries at this stage literally controlled foreign governments and created empires from them to provide the cheap labor and cheap natural resources they needed to remain competitive. Starting in the early to mid-20th century, when the US Empire began ruling by "speaking softly and carrying a big stick," American "influence" and international agreements have allowed developed countries to have access to emerging countries' cheap labor and investment opportunities without directly controlling their governments. In this stage countries are on top of the world and are enjoying it. **I call countries in this stage "peak health countries." The United States was in this stage from 1950 to 1965. China is now moving into it.** The key is to maintain the determinants leading to strength for as long as possible.

Stage 4: People and Their Countries Are Poorer and Still Think of Themselves as Rich. In this stage, debts rise relative to income. The psychological shift behind this leveraging up occurs because the people who lived through the first two stages have died off or become irrelevant and those whose behavior matters most are used to living well and not worrying about the pain of not having enough money. Because the workers in these countries earn and spend a lot, they become expensive, and because they are expensive, they experience slower real income growth rates. Since they are reluctant to constrain their spending in line with their reduced income growth rates, they lower their savings rates, increase their debts, and cut corners. Because their spending continues to be strong, they continue to appear rich, even though their balance sheets are deteriorating. The reduced level of efficient investments in infrastructure, capital goods, and research and development slows their productivity gains. Their cities and infrastructure become older and less efficient than in the two previous stages. They increasingly rely on their reputation rather than on their competitiveness to fund their deficits. Countries typically spend a lot of money on the military at this stage to protect their global interests, sometimes in very large amounts because of wars. Often, though not always, countries run "twin deficits"—i.e., both balance of payments and government deficits. In the last few years of this stage, bubbles frequently occur.

Whether because of wars[3] or bursting financial bubbles or both, what typifies this stage is an accumulation of debt that can't be paid back in non-depreciated money. **I call countries in this stage "early declining countries."** While countries of all sizes can go through this stage, when big countries go through it, they are typically approaching their decline as great empires.

Stage 5: People and Their Countries Are Poor and They Think of Themselves as Poor. This is when the gaps described in Stage 4 cease to exist and the reality of the country's situation is hitting home. After bubbles burst and deleveragings occur, private debts grow, while private sector spending, asset values, and net worths decline in a self-reinforcing negative cycle. To compensate, government debt and government deficits grow, and central bank "printing" of money typically increases. Central banks and governments cut real interest rates and increase nominal GDP growth so that it is comfortably above nominal interest rates in order to ease debt burdens. As a result of these low real interest rates, weak currencies, and poor economic conditions, their debt and equity assets perform poorly. Increasingly, these countries have to compete with less expensive countries that are in earlier stages of development. Their currencies depreciate and they like it because it makes the deleveraging less painful. As an extension of these economic and financial trends, countries in this stage see their power in the world decline further. **I call countries in this stage "clearly declined countries."** It typically takes a long time—if it ever happens—for clearly declined empires' psychologies and attributes to go through the full cycle that brings them to their old peaks again. The Romans and the Greeks never have, though the Chinese have a few times.

11. Humanity's Inventiveness. • ***Humanity's capacity to invent solutions to its problems and to identify how to make things better has proven to be far more powerful than***

all of its problems combined. Because knowledge is gained more than it is lost, it advances more in spurts and sputters than in cycles that have downs as well as ups. The spurts come when societies are in the upward swings of the Big Cycle and the sputters come when they are in the downward swings. The Renaissance periods of great creativity that produce advances in just about all areas—the sciences, the arts, philosophies about how people should be with each other and govern, etc.—come more during the peaceful and prosperous parts of the Big Cycle, when the systems for creating innovations are good rather than bad.

While specific inventions and the ways they come about have evolved through time, they have unwaveringly evolved toward doing and making things better, replacing manual labor with machines and automation, and making people around the world more interconnected. There are always new inventions and improvements. The most important and undeniable trend of technological advancement has been toward higher living standards. That trend is likely to accelerate in unimaginable ways. Beyond that, computerization is changing the character of decision making, making it faster and less emotional. As helpful as that is, it also poses certain dangers.

- ***The degree of inventiveness and innovation in a society is the main driver of its productivity.*** An innovative and commercial spirit is the lifeblood of a thriving economy. Without innovation, productivity growth would grind to a halt. Innovations that allow a country's workers to produce more relative to the rest of the world feed into their cost competitiveness, making them more attractive places to do business.

The drive to tinker and invent, to discover, to improve from prior failures—this is how people learn and find new and better ways of creating things of value. In a market-based system, the most powerful way to drive innovation is to bring new ideas to market and to commercialize and profit from them. The marketplace is incredibly efficient at weeding out bad ideas and pricing good ones. In this way the concepts of innovation and commercialism go hand in hand. They capture whether people in a society value new knowledge and the creation of new things, and whether incentives are aligned to encourage them to seek a profit by commercializing them.

In other words:

- ***Innovation + Commercial Spirit + Thriving Capital Markets***

=

Great Productivity Gains

=

Increases in Wealth and Power

Because there are big differences in the strengths of these determinants, I try to measure them and take them into consideration in my model.

17. Class Struggles. For as long as there has been recorded history, in almost all societies a very small percentage of the population (the "ruling classes" or "the elites") have controlled most of the wealth and power (though those percentages have varied).[4] Naturally those who benefit from and control the system by and large like the system and seek to maintain it. Because those with wealth can influence those with power and because those with power can influence those with wealth, these ruling classes or elites have alliances among themselves and want to maintain the existing order with everyone following its dictums and laws, even as the system increases the gaps between those with power and wealth and those without them. As a result, all internal orders are run by certain classes of people who have wealth and power and who operate in symbiotic relationships with each other to maintain the order. Though aligned not to disrupt the order that benefits them, throughout time these elites have struggled with each other over wealth and power and have also struggled with non-elites who want wealth and power. When times are good and most people prosper, the struggles are smaller; when times are bad, the struggles are worse. And when things are very bad for a large percentage of the people—e.g., there is an unresolvable debt crisis, a very bad economy, a very bad act of nature—the resulting suffering, stress, and struggles typically lead to revolutions and/or civil wars.

As Aristotle said a long time ago: "The poor and the rich quarrel with one another, and whichever side gets the better, instead of establishing a just or popular government, regards political supremacy as the prize of victory."

Classically, the Big Cycle transpires with periods of peace and productivity that increase wealth in a disproportionate way, which leads to a very small percentage of the population gaining and controlling exceptionally large percentages of the wealth and power, then becoming overextended, which leads to encountering bad times that hurt those who are the least wealthy and powerful the hardest, which then leads to conflicts that produce revolutions and/or civil wars, which then lead to the creation of a new order and the cycle beginning again.

● ***Throughout time and in all countries the people who have the wealth are the people who own the means of wealth production and, in order to maintain it, they work with the people who have the power to set and enforce the rules.*** While that has always been the case, the exact form of it has evolved and will continue to evolve.

For example, as explained in Chapter 1, for most of the 13th through 19th centuries, the prominent internal order all around the world consisted of the ruling classes or elites being 1) the monarchy, which ruled in conjunction with 2) the nobility, which controlled the means of production (at the time that capital was agricultural land), and/or 3) the military. Workers were viewed as part of the means of production and had essentially no say in how the order was run.

Even societies that had little or no contact with each other developed in similar ways because they had similar situations to deal with and because the nature of their decision making was similar.[5] Across countries there always were, and still are, different levels of governance at the country level, the state/province level, the municipality level, etc., and there are timeless and universal ways that they operate and interact with each other that have been pretty consistent across the world. The monarchs needed people to manage the day-to-day operations for them. The top people were ministers, who oversaw the bureaucracies of people who did the various jobs that needed to be done for government to work. What exists today is simply the result of the natural evolutions of these timeless and universal ways of interacting, with different countries' own cultural flavors thrown in. For example, the roles of the ministers who helped the monarchs evolved into the roles of prime ministers and other ministers that now exist in almost all countries (though in the United States they are called "secretaries").

Over time, these systems have evolved in varied but logical ways as a result of struggles for wealth and power. For example, in England around 1200 there was a wealth and power struggle that evolved gradually at first and then abruptly into a civil war, which is how these shifts tend to evolve, between the nobility and the monarchy. Like most of these struggles, the fight was over money and the power to determine who got how much money. The monarchy under King John wanted to get more tax money and the nobles wanted to give less tax money. They disagreed over how much say the nobles should have on the matter, so they had a civil war. The nobles won and gained more power to set the rules, which led to what they first called a "council," which soon became the first Parliament, which evolved into what exists in England today. The peace treaty that formalized this deal into law in 1215 is called the Magna Carta. Like most laws, this one didn't matter much relative to power so another civil war broke out in which the nobles and the monarchy again fought over wealth and power. In 1225 they wrote up a new Magna Carta under Henry III (King John's son), which those with power got to interpret and enforce. A few decades later, the fighting picked up again. In that war, the nobles cut off tax payments to the monarchy, which forced Henry III to give in to the nobles' demands. These struggles went on constantly, leading the orders to evolve.

Fast forward to the 15th, 16th, and 17th centuries and one can see that there were big changes in the sources of wealth, at first because of global exploration and colonialism (starting with the Portuguese and the Spanish) and later because of the invention of capitalism (stocks and bonds) and labor-saving machines that fueled the Industrial Revolutions (particularly helping the Dutch and then the British), which made those who profited from these sources of wealth more powerful—i.e., the shifts in wealth and power over these centuries were from a) landowning nobles (who then had the wealth) and monarchies (who then had the political power) to b) capitalists (who in the later period had the wealth) and elected representatives or autocratic government leaders (who in the later period had the political power). Almost all countries made these shifts—some peacefully but most painfully.

For example, in France for most of the 17th and 18th centuries, the king ruled in a balance of power arrangement with three other classes: 1) the clergy, 2) the nobility, and 3) the commoners. There were representatives of these groups who voted. The first two classes, who accounted for only 2 percent of the population, had more votes than—or eventually the same number of votes as—the commoners, who made up 98 percent of the population. They called this internal order based on three classes the ancien régime (which means "old order"). Then practically overnight it changed in a revolutionary way via the French Revolution, which began on May 5, 1789, when the third class—the commoners—had enough of that system, overthrew the others, and took the power for itself. In most countries around the world at the time, the same basic ruling order prevailed—i.e., the monarchy and nobles, who accounted for a very small percentage of the population and had most of the wealth, ruled until all of a sudden there was a civil war/revolution that led the old order to be replaced with a very different new ruling order.

Though the internal orders for managing these class struggles were and are different in different countries, they evolved similarly across countries. For example, they evolved both gradually (through reforms) and abruptly (through civil wars/revolutions) and they evolved into those orders that now exist in all countries. I expect they will continue to evolve gradually and abruptly to produce new domestic orders. While the classes who have the wealth and political power change, the processes that produce these changes have remained pretty much the same through time right up to today. These changes have occurred through struggles that have led to both a) peaceful reforms through negotiations and b) violent reforms via civil wars and revolutions. The peaceful reforms tend to come earlier in the cycle and the violent civil wars and revolutionary reforms tend to come later in the cycle for logical reasons that we will delve into later.

I cannot overstate the importance of class struggles relative to individual struggles. We, especially those of us in the United States, which is thought of as a "melting pot," tend to focus more on individual struggles and not give adequate attention to class struggles. I didn't fully realize the importance of class struggles until I did my extensive study of history, which led me to this principle:

- ***In all countries throughout time (though in varying degrees) people find themselves within "classes" either because they choose to be with people like them or because others stereotype them as part of certain groups.*** Power is usually shared among three or four classes. Who and what people feel most connected with, are around most, and are most like will determine which class or classes they are in; how people are classed determines who their friends or allies are and who their enemies are. While rich and poor and right (i.e., capitalist) and left (i.e., socialist) are the most common big class distinctions, there are many other important distinctions, such as race, ethnicity, religion, gender, lifestyle (e.g., liberal or conservative), and location (e.g., urban versus suburban versus rural). Generally speaking, people tend to cluster in these classes, and when times are good early in the cycle there is more harmony among these classes and when things are bad there is more fighting among them.

While I love that the United States is the country where these class distinctions matter least, people's classes still matter in the US and they matter a lot more during stressful times when class conflicts intensify.

To help you get the picture in a more intimate way, let's do a simple exercise. Assume that most people who don't know you well look at you as being in a member of one or several classes, because that's a good assumption. Now, to imagine how you are perceived, look at the following list and ask yourself which classes you fall into. After you answer that, ask yourself which classes you feel an affinity for and expect to be your allies. Which classes do you not like or view as your enemies? Which ones are the ruling classes, and which ones are the revolutionary classes who want to topple them? Which ones are on the ascent, and which ones are on the decline? You might consider writing these down and thinking about them because during periods of greater conflict the classes you are in or are assumed to be in will become more important in determining who you will be with and against, what you will do, and where you will end up.

1. **Rich or poor?**

2. **Right, left, or moderate?**
3. **Race?**
4. **Ethnicity?**
5. **Religion?**
6. **Gender?**
7. **Lifestyle (e.g., liberal or conservative)?**
8. **Location (e.g., urban, suburban, or rural)?**

Still today only a small percentage of the population, which comes from only a few of these classes, has most of the wealth and power and rules as "the elites." To me it is clear that the capitalist class now has the most financial power in most countries and political power in democracies lies in the hands of all the people who choose to vote, while in autocracies it lies in the hands of the limited number of people selected by whatever process they have to make selections.[6] So, for the most part today, those are the "ruling classes" and "the elites" who oversee the current domestic orders, though they are now under attack, so this is probably shifting. For example, there is now a big movement in the United States to be much more inclusive of members of different classes in both the capitalist money-making world and in the political world. These shifts can be good or bad depending on whether they are handled peacefully or violently and smartly or stupidly. **One timeless and universal truth that I saw go back as far as I studied history, since before Confucius who lived around 500 BCE, is that** ● ***those societies that draw on the widest range of people and give them responsibilities based on their merits rather than privileges are the most sustainably successful because 1) they find the best talent to do their jobs well, 2) they have diversity of perspectives, and 3) they are perceived as the fairest, which fosters social stability.***

I presume that the current internal orders of countries, like those of the past, will continue evolving to become something different through the struggles of different classes with each other over how to divide wealth and political power. Because this wealth and power dynamic is very important, it is worth watching closely to discern which classes are gaining and which ones are losing wealth and power (e.g., AI and information technology developers are now evolving to gain it at the expense of those who are being replaced by such technologies) and also to discern the reactions to these shifts that lead the cycles to change.

So, as I see it, everything is changing in classic ways driven by a tried-and-true perpetual-motion machine. This machine has produced, and is producing, different systems, such as communism, fascism, autocracies, democracies, and evolutionary descendants and hybrids of these, such as “state capitalism” in China. It will produce new forms of internal orders to divide wealth and allocate political power that will affect our lives greatly, all based on how people choose to be with each other and how human nature enters into how they make their choices.

18. The Political Left/Right Cycle. Capitalists (i.e., those of the right) and socialists (i.e., those of the left) don’t just have different self-interests—they have different deep-seated ideological beliefs that they are willing to fight for. The typical perspective of the rightist/capitalist is that self-sufficiency, hard work, productivity, limited government interference, allowing people to keep what they make, and individual choice are morally good and good for society. They also believe that the private sector works better than the public sector, that capitalism works best for most people, and that self-made billionaires are the biggest contributors to society. Capitalists are typically driven crazy by financial supports for people who lack productivity and profitability. To them, making money = being productive = getting what one deserves. They don’t pay much attention to whether the economic machine is producing opportunity and prosperity for most people. They can also overlook the fact that their form of profit making is suboptimal when it comes to achieving the goals of most people. For example, in a purely capitalist system, the provision of excellent public education—which is clearly a leading cause of higher productivity and greater wealth across a society—is not a high priority.

The typical perspective of the leftist/socialist is that helping each other, having the government support people, and sharing wealth and opportunity are morally good and good for society. They believe that the private sector is by and large run by capitalists who are greedy, while common workers, such as teachers, firefighters, and laborers, contribute more to society. Socialists and communists tend to focus on dividing the pie well and typically aren't very good at increasing its size. They favor more government intervention, believing those in government will be fairer than capitalists, who are simply trying to exploit people to make more money.

I've had exposure to all kinds of economic systems all over the world and have seen why ***the ability to make money, save it, and put it into capital (i.e., capitalism) is an effective motivator of people and allocator of resources that raises people's living standards. But capitalism is also a source of wealth and opportunity gaps that are unfair, can be counterproductive, are highly cyclical, and can be destabilizing. In my opinion, the greatest challenge for policy makers is to engineer a capitalist economic system that raises productivity and living standards without worsening inequities and instabilities.***

21. The Big Balance of Power Cycle That Drives the Big Peace/War Cycle Both Within Countries and Between Countries. In studying a lot of history and experiencing a tiny sliver of it myself I have seen how the balance of power dynamic drives virtually all struggles for power—e.g., office politics within organizations, local and national politics in shaping the domestic order, and international politics in shaping the world order. It applies equally well to determining the formations and changes in world orders as in domestic orders. The dynamic transpires in a series of steps explained here, though how exactly it unfolds depends on the order and people at the time these stages unfold:

Step 1: The formation of alliances. When there isn't roughly equal power (e.g., if in the US the Democrats have much more power than the Republicans or vice versa), the more powerful party will take advantage of and control the less powerful party. To neutralize the stronger party, the weaker party naturally finds other parties to join it in opposing the stronger party so collectively they can have the same or more power as the opposition. The weaker party does this by giving the other parties what they want in return for their support. If the formerly weaker party collectively gains more power than the formerly stronger party from doing this, the formerly stronger party cuts deals with other parties to ally with them to eliminate the superiority of the opposition. As a result, allies who have very different vested interests unite in opposing the common enemy—as the saying goes, "the enemy of my enemy is my friend." This dynamic naturally leads to the different sides having roughly equal amounts of power and splits within themselves. Sometimes the differences within the parties are so great that some segments want to destroy the other segments in order to gain control of their party. This alliance- and enemy-forming dynamic happens at all different levels of relationships, from the most important international alliances that define the most important elements of the world order down to the most important alliances within countries that define the internal orders, down to those within states, within cities, within organizations, and among individuals. The most important evolutionary shift to affect these has been the shrinking of the world to make allies and enemies more global. In the old days they were less global (e.g., European countries formed alliances to fight other European countries, Asian countries did the same in Asia, etc.), but as the world has shrunk because of improved transportation and communications it has become more interconnected and bigger and more global alliances have developed. That is why there were two big sides in World Wars I and II and likely will be going forward.

Step 2: War to determine the winners and losers. Big fights typically happen when both sides have roughly equal powers and existential differences exist between them. Big fights typically don't occur when there are big asymmetries in power because it would be stupid for obviously weaker entities to fight obviously stronger ones, and if they did fight, the fights would be small in scale. However, sometimes when there are roughly equal levels of power on both sides, stalemates and gridlocks rather than big fights can occur when the existential threat of harming oneself in the process of trying to beat the other side is greater than the gains that would come from having a fight to the death. For example, when there is mutually assured destruction—e.g., as the US and the Soviet Union faced—there is more likely to be a stand-off than a fight.

While these big fights are typically violent, they can be nonviolent if the entities have nonviolent rules of engagement that they adhere to that allow the resolution of disputes, most importantly the existential ones. For example, in the

2020 US election, the two political parties had roughly equal amounts of power and irreconcilable differences so that they had a big fight for political control. That led to the storming of the US Capitol on January 6, 2021, but eventually the peaceful transfer of political power as set out in the Constitution prevailed. History has shown that, when there are not clear rules and/or when the parties don't abide by them, the fighting will be far more brutal, often to the death.

Step 3: Fighting among the winners. History shows us that after the fight for power in which the common enemy is defeated, those who united against the common enemy typically fight among themselves for power and those in the losing party do the same as they plan their next attack. I call this the "purge" state of the balance of power dynamic. It has happened in all cases, with the Reign of Terror in France and the Red Terror in the Soviet Union being the most well-known. This same sort of fighting has happened between countries, as with the US and the Soviet Union, who were allies in World War II. Similarly, the united front of Chinese communists and nationalists that fought the Japanese in the war immediately battled each other for power when the war was over. Understanding this typical dynamic, one should look out for internal fighting among the winners right after the big war is over. We should always watch whether the factions within the same parties are inclined to fight each other for control of their parties. When new regimes (i.e., the winning parties) come to power watch what they do with the enemies they defeated. What happens next depends on the system and the leaders in the system. In the US and generally in democracies, the rules allow the losers to remain unharmed and unconstrained, which allows them to try to regain power and fight again. In harsh autocracies, the losers are eliminated one way or another.

Step 4: Peace and prosperity occur but eventually lead to excesses reflected in large wealth and opportunity gaps and overindebtedness. History shows us that because of this dynamic the best of times—i.e., when there is peace and prosperity—typically happens after a war, when the leadership and power structure are clearly established so there isn't big fighting for power within the country or with other countries—because there is an obviously more powerful entity that enables the less powerful entities to have a good life.

Step 5: Increasing conflict leads to revolutionary changes in domestic and world orders. For as long as there is peace and prosperity for the majority of the people, which will only be the case if the system is fair and the majority of the people remain self-disciplined and productive, peace and prosperity are likely to continue. However, as previously discussed, periods of peace and prosperity also tend to encourage big wealth gaps and debt bubbles that lead to conflicts when prosperity fades and there are other things to fight over.

This cycle tracks the internal and external order and disorder cycles that we will explore in Chapters 5 and 6.

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[1] The Peace of Westphalia in 1648 created countries—i.e., sovereign states—as we now know them.

[2] Japan from 1971 to 1990 is an exception with regards to the military.

[3] Germany in World War I and the UK in World War II are classic examples.

[4] For example, in the last century, the wealth share of the top 1 percent in the US ranged from close to 50 percent in the 1920s to a bit over 20 percent in the late 1970s; in the UK, it ranged from over 70 percent in 1900 to around 15 percent in the 1980s and is currently around 35 percent (figures from World Inequality Database). These shifts in inequality can be seen at least as far back as the Roman Republic, as Walter Scheidel describes in *The Great Leveler*.

[5] For example, for much of history Europe, China, and most countries had monarchs and nobles as the ruling classes, yet they were a bit different. In Europe, the church was also part of the ruling mix. In Japan, the monarchy (the emperor and his ministers), the military, and the business community (the merchants and artisans) were the ruling elites.

[6] That doesn't mean that those who run autocracies don't ultimately report to the people because the people could overthrow the government.

CHAPTER 3

THE BIG CYCLE OF MONEY, CREDIT, DEBT, AND ECONOMIC ACTIVITY

What most people and their countries want most is wealth and power, and money and credit are the biggest influences on how wealth and power rise and decline. If you don't understand how money and credit work, you can't understand how the system works, and if you don't understand how the system works, you can't understand what's coming at you.

For example, if you don't understand how the Roaring '20s led to a debt bubble and a big wealth gap, how the bursting of that debt bubble led to the 1930–33 Great Depression, and how the depression led to conflicts over wealth all over the world, you won't understand why Franklin D. Roosevelt was elected president in 1932. You also won't understand why, soon after his inauguration, he announced a new plan in which the central government and the Federal Reserve would together provide a lot of money and credit, a change that was similar to what was happening in other countries at the time and that is similar to what is happening today in response to the pandemic-caused crisis. Unless you understand how money and credit work, you can't understand why the world changed as it did in 1933 or what happened next (World War II), how the war was won and lost, and why the new world order was created as it was in 1945. But when you can recognize the underlying mechanics that drove all of those things in the past, you can also understand what is happening now and have a much better sense about what is likely to happen in the future.

In speaking with several of the world's most renowned historians and political practitioners, including current and former heads of state, foreign ministers, finance ministers, and central bankers, we recognized that we each held different pieces of the puzzle to explain how the world works. I had been lacking an adequate practical understanding of the workings of politics and geopolitics, and they lacked an adequate practical understanding of the way that money and credit work. Several told me that understanding money and credit in this way has been the biggest missing piece in their quest to understand the lessons of history, and I explained to them that their perspectives helped me understand the political dynamics that affect policy choices. This chapter is focused on the money, credit, and economic piece.

Let's start with money and credit.

THE TIMELESS AND UNIVERSAL FUNDAMENTALS OF MONEY AND CREDIT

- ***All entities—people, companies, nonprofit organizations, and governments—deal with the same basic financial realities, and always have.*** **They have money that comes in (i.e., revenue) and money that goes out (i.e., expenses) that, when netted, make up their net income. These flows are measured in numbers that appear in income statements. If an entity brings in more than it spends, it has a profit that causes its savings to go up. If it spends more than it earns, its savings go down, or it makes up the difference by borrowing or taking money from someone else. If an entity has many more assets than liabilities (i.e., a large net worth), it can spend above its income by selling assets until the money runs out, at which point it has to slash its expenses. If it doesn't have much more in assets than it has in liabilities and its income falls beneath the amount it needs to pay out to cover the total of its operating expenses and its debt-service expenses, it will have to cut its expenses or will default or restructure its debts.**

All of an entity's assets and liabilities (i.e., debts) can be shown in its balance sheet. Whether it writes those numbers down or not, every country, company, nonprofit organization, and individual has them. When economists, for example, combine each entity's income, expenses, and savings, they get all entities' incomes, expenses, and savings. • ***The way entities collectively handle their finances as reflected in their income statements and balance sheets is the biggest driver of changes in internal and world orders.*** **If you can take your understanding of your own income, expenses, and savings, imagine how that applies to others, and put them together, you will see how the whole thing works.**

Take a moment to think about your own financial situation. How much income do you have now relative to your expenses and how much will you have in the future? How much savings do you have and what are those savings invested in? Now play things out. If your income fell or disappeared, how long would your savings last? How much risk do you have in the value of your investments and savings? If that value fell by half, how would you be financially? Can you easily sell your assets to get cash to pay your expenses or service your debts? What are your other sources of money, from the government or from elsewhere? These are the most important calculations you can make to ensure your economic well-being. Now look at others—other people, businesses, nonprofit organizations, and governments—realizing that the same is true for them. See how we are interconnected and what changes in conditions might mean for you and others who might affect you. Since the economy is the sum of these entities operating in this way, it will help you understand what is happening and what is likely to happen.

For example, since one entity's spending is another's income, when one entity cuts its expenses, that will hurt not just that entity, but it will also hurt others who depend on that spending to earn income. Similarly, since one entity's debts are another's assets, an entity that defaults reduces other entities' assets, which requires them to cut their spending. This dynamic produces a self-reinforcing downward debt and economic contraction that becomes a political issue as people argue over how to divide the shrunken pie.

As a principle, • ***debt eats equity.*** **What I mean by that is that debts have to be paid above all else. For example, if you own a house (i.e., you have "equity" ownership) and you can't make the mortgage payments, the house will be sold or taken away. In other words, the creditor will get paid ahead of the owner of the house. As a result, when your income is**

less than your expenses and your assets are less than your liabilities (i.e., debts), you are on the way to having to sell your assets.

Unlike what most people intuitively think, **there isn't a fixed amount of money and credit in existence. Money and credit can easily be created by central banks. People, companies, nonprofit organizations, and governments like it when central banks make a lot of money and credit because it gives them more spending power. When the money and credit are spent, it makes most goods, services, and investment assets go up in price. It also creates debt that has to be repaid, which requires people, companies, nonprofit organizations, and governments to eventually spend less than they earn, which is difficult and painful. That is why money, credit, debt, and economic activity are inherently cyclical. In the credit-creation phase, demand for goods, services, and investment assets and the production of them are both strong, and in the debt-repayment phase, both are weak.**

But what if the debts never had to be paid back? Then there would be no debt squeeze and no painful paying back period. But that would be terrible for those who lent because they'd lose their money, right? Let's think for a moment to see if we can find a way of resolving debt issues without harming either borrowers or lenders.

Since governments have the ability to both make and borrow money, why couldn't the central bank lend money at an interest rate of about 0 percent to the central government to distribute as it likes to support the economy? Couldn't it also lend to others at low rates and allow those debtors to never pay it back? Normally debtors have to pay back the original amount borrowed (principal) plus interest in installments over a period of time. But the central bank has the power to set the interest rate at 0 percent and keep rolling over the debt so that the debtor never has to pay it back. That would be the equivalent of giving the debtors the money, but it wouldn't look that way because the debt would still be accounted for as an asset that the central bank owns, so the central bank could still say it is performing its normal lending functions. **This is the exact thing that happened in the wake of the economic crisis caused by the COVID-19 pandemic. Many versions of this have happened many**

times in history. Who pays? It is bad for those outside the central bank who still hold the debts as assets—cash and bonds—who won't get returns that would preserve their purchasing power.

The biggest problem that we now collectively face is that for many people, companies, nonprofit organizations, and governments, their incomes are low in relation to their expenses, and their debts and other liabilities (such as those for pensions, healthcare, and insurance) are very large relative to the value of their assets. It may not seem that way—in fact, it often seems the opposite—because there are many people, companies, nonprofit organizations, and governments that look rich even while they are in the process of going broke. They look rich because they spend a lot, have plenty of assets, and even have plenty of cash. However, if you look carefully, you will be able to identify those that look rich but are in financial trouble because they have incomes that are below their expenses and/or liabilities that are greater than their assets, so if you project what will likely happen to their finances in the future, you will see that they will have to cut their expenses and sell their assets in painful ways that will leave them broke. We each need to do those projections of what the future will look like for our own finances, for others who are relevant to us, and for the world economy. In a nutshell, for some people, companies, nonprofit organizations, and countries, **the liabilities are enormous relative to the net incomes and the asset values that are required to meet those obligations, so they are financially weak, but they don't look that way because they spend a lot financed by borrowing**.

If anything I've written here is confusing to you, I urge you to take a moment to try to apply it to your own circumstances. Pencil out what your financial safety margin looks like (how long will you be financially OK if the worst-case scenario happens—e.g., you lose your job and your investment assets fall to be only half as much to account for possible price falls, taxes, and inflation). Then do that calculation for others, add them up, and then you will have a good picture of the state of your world. I've done that with the help of my partners at Bridgewater and find it invaluable in imagining what is likely to happen.[1]

In summary, these basic financial realities work for all people, companies, nonprofit organizations, and governments in the same way

they work for you and me, with the one big, important exception I mentioned earlier. All countries can create money and credit out of the air to give to people to spend or lend out. By producing money and giving it to debtors in need, central banks can prevent the debt crisis dynamic that I just explained. For that reason I will modify the prior principle to say: ● ***debt eats equity but central banks can feed debt by printing money instead.*** It should be no surprise that governments print money when debt crises cause politically unacceptable amounts of equity-eating debt and corresponding economic pain.

However, not all money that governments print is of equal value.

The monies (i.e., currencies) that are widely accepted around the world are called reserve currencies. At the time of my writing this, the world's dominant reserve currency is the US dollar, which is created by the US central bank, the Federal Reserve. A much less important reserve currency is the euro, which is produced by the Eurozone countries' central bank, the European Central Bank. The Japanese yen, the Chinese renminbi, and the British pound are relatively small reserve currencies now, though the renminbi is quickly growing in importance.

● ***Having a reserve currency is great while it lasts because it gives a country exceptional borrowing and spending power and significant power over who else in the world gets the money and credit needed to buy and sell internationally.*** However, having a reserve currency typically sows the seeds of a country ceasing to be a reserve currency country. That is because it allows the country to borrow more than it could otherwise afford to borrow, and the creation of lots of money and credit to service the debt debases the value of the currency and causes the loss of its status as a reserve currency. The loss of its reserve currency status is a terrible thing because ● ***having a reserve currency is one of the greatest powers a country can have because it gives the country enormous buying power and geopolitical power.***

In contrast, non-reserve currency countries often find themselves in need of money in a reserve currency (e.g., dollars) when they have a lot of debt denominated in that currency, which they can't print, or they don't have much savings in that currency and their ability to earn the currency they need falls off. **When countries desperately need reserve currencies to service their reserve currency-denominated debts, and to buy things from sellers who**

only accept reserve currencies, they can go bankrupt. This has happened often in the past and it is where things now stand for a number of countries. It is also where things stand for local governments and states and for many of us. This configuration of circumstances has been handled in the same way, so it's easy to see how this machine works—and that is what I will show you in this chapter.

Let's start with the basics and build from there.

WHAT IS MONEY?

Money is a medium of exchange that can also be used as a storehold of wealth.

By "medium of exchange," I mean something that can be given to others to buy things. Basically, people produce things in order to exchange them with people who have other things they want. Because carrying around non-money objects in the hope of exchanging them for what one wants (i.e., bartering) is inefficient, virtually every society that has ever existed has created a form of money (i.e., currency), which is something portable that everyone agrees is of value so it can be exchanged for what they want.

By a "storehold of wealth," I mean a vehicle for storing buying power between acquiring it and spending it. While one of the most logical things to store wealth in is a claim on money that can be used later, people also store their wealth in assets that they expect will retain their value or appreciate (such as gold, silver, gems, paintings, real estate, stocks, and bonds). By holding on to something that appreciates, they figure that they can do a bit better than just holding on to the currency—and, when needed, can always exchange the thing they're holding to get the currency to buy the things they want to buy. This is where credit and debt come into the picture. It is important to understand the difference between money and debt. Money is what settles claims—you pay your bills and are done. Debt is a promise to deliver money.

When lenders lend, for example, they assume the money plus the interest they receive back will buy more goods and services than if they had simply held on to the money. When all goes well, the borrowers use the money productively and earn a profit with it themselves, so they can pay the lenders back and still have money left over. While the loan is outstanding, it is an asset for the lender (e.g., a bond) and a liability (i.e., debt) for the borrower. When the money is paid back, the assets and liabilities disappear, and both the borrower and lender are better off, having essentially split the profits that came from the productive lending. Such lending is also good for society, which benefits from the resulting productivity gains.[2]

It's important to realize that **most money and credit (especially the government-issued money that now exists) have no intrinsic value. They are just journal entries in an accounting system that can easily be changed. The purpose of that system is to help allocate resources efficiently so that productivity can grow, rewarding both lenders and borrowers, but the system periodically breaks down**. When that happens (as it always has, since the beginning of time), the currency supply is "monetized"[3] and currency values fall or are destroyed, and wealth shifts in a big way, sending shockwaves through the economy and markets.

What all this means is that the debt and credit machine doesn't work perfectly. Supplies, demands, and values of money cycle up and down. The upswings produce joyful abundance. The downswings produce painful restructurings.

Let's now get into how these cycles work, building from the fundamentals up to where we are now.

MONEY, CREDIT, AND WEALTH

While money and credit are associated with wealth, they aren't the same thing as wealth. Because money and credit can buy wealth (i.e., goods and services), the amount of money and credit you have and the amount of wealth you have look pretty much the same. But you cannot create more wealth simply by creating more money and credit. To create more wealth, you have to be more productive. The relationship between the creation of

money and credit and the creation of wealth is often confused, yet it is the biggest driver of economic cycles. Let's look at it more closely.

There is typically a mutually reinforcing relationship between the creation of money and credit and the creation of goods, services, and investment assets that are produced, which is why they're often confused as being the same thing. **Think of it this way: there is both a financial economy and a real economy. Though they are related, they are different. Each has its own supply-and-demand factors that drive it.** In the real economy, supply and demand are driven by the amount of goods and services produced and the number of buyers who want them. When the level of goods and services demanded is strong and rising and there is not enough capacity to produce the things demanded, the real economy's capacity to grow is limited. If demand keeps rising faster than the capacity to produce, prices go up and inflation rises. That's where the financial economy comes in. Facing inflation, central banks normally tighten money and credit to slow demand in the real economy; when there is too little demand, they do the opposite by providing money and credit to stimulate demand. **By raising and lowering supplies of money and credit, central banks are able to raise and lower the demand and production of financial assets, goods, and services.** But they're unable to do this perfectly, so we have the short-term debt cycle, which we experience as alternating periods of growth and recession.

Then of course there is the value of money and credit to consider, which is based on its own supply and demand. When a lot of a currency is created relative to the demand for it, it declines in value. Where the money and credit flow is important to determining what happens. For example, when they no longer go into lending that fuels increases in economic demand and instead go into other currencies and inflation-hedge assets, they fail to stimulate economic activity and instead cause the value of the currency to decline and the value of inflation-hedge assets to rise. At such times high inflation can occur because the supply of money and credit has increased relative to the demand for it, which we call "monetary inflation." That can happen at the same time as there is weak demand for goods and services and the selling of assets so that the real economy is experiencing deflation. That is how inflationary depressions come about. For these reasons **we have to watch movements in the supplies and demands of both the real economy and the financial economy to understand what is likely to happen financially and economically**.

For example, how financial assets are produced by the government through fiscal and monetary policy has a huge effect on who gets the buying power that goes along with them, which also determines what the buying power is spent on. Normally money and credit are created by central banks and flow into financial assets, which the private credit system uses to finance people's borrowing and spending. But in moments of crisis, governments can choose where to direct money, credit, and buying power rather than it being allocated by the marketplace, and capitalism as we know it is suspended. This is what happened worldwide in response to the COVID-19 pandemic.

Related to this confusion between the financial economy and the real economy is the relationship between the prices of things and the value of things. Because they tend to go together, they can be confused as being the same thing. They tend to go together because when people have more money and credit, they are more inclined to spend more and can spend more. To the extent that spending increases economic production and raises the prices of goods, services, and financial assets, it can be said to increase wealth because the people who already own those assets become "richer" when measured by the way we account for wealth. However, that increase in wealth is more an illusion than a reality for two reasons: 1) the increased credit that pushes prices and production up has to be paid back, which, all things being equal, will have the opposite effect when the bill comes due and 2) the intrinsic value of a thing doesn't increase just because its price goes up.

Think about it this way: if you own a house and the government creates a lot of money and credit, there might be many eager buyers who would push the price of your house up. But it's still the same house; your actual wealth hasn't increased, just your calculated wealth. It's the same with any other investment asset you own that goes up in price when the government creates money—stocks, bonds, etc. The amount of calculated wealth goes up but the amount of actual wealth hasn't gone up because you own the exact same thing you did before it was considered to be worth more. In other words, using the market values of what one owns to measure one's wealth gives an illusion of changes in wealth that don't really exist. As far as understanding how the economic machine works, the important thing to understand is that **money and credit are stimulative when they're given out and depressing when they have to be paid back. That's what normally makes money, credit, and economic growth so cyclical.**

The central bankers who control money and credit (i.e., central banks) vary the costs and availability of money and credit to control markets and the economy. When the economy is growing too quickly and they want to slow it down, central bankers make less money and credit available, causing both to become more expensive. This encourages people to lend rather than borrow and spend. When there is too little growth and central bankers want to stimulate the economy, they make money and credit cheap and plentiful, which encourages people to borrow and invest and/or spend. These variations in the cost and availability of money and credit also cause the prices and quantities of goods, services, and investment assets to rise and fall. But banks can only control the economy within their capacities to produce money and credit growth, and their capacities to do that are limited.

Think of the central bank as having a bottle of stimulant it can inject into the economy as needed. When the markets and the economy sag, it delivers shots of the money and credit stimulant to pick them up. When the markets and economy are too strong, it gives them less or no stimulant. These moves lead to cyclical rises and declines in the amounts and prices of money and credit, and of goods, services, and financial assets. These moves typically come in the form of short-term debt cycles and long-term debt cycles. The short-term debt cycles of ups and downs typically last about eight years, give or take a few. The timing is determined by how long it takes the stimulant to raise demand to the point that it reaches the limits of the real economy's capacity to produce. Most people have seen enough of these short-term debt cycles—popularly known as "the business cycle"—to know what they are like, to such an extent that they mistakenly think they will go on working this way forever. **I distinguish them from the long-**

term debt cycle, which typically plays out over 50 to 75 years (and so contains about six to 10 short-term debt cycles).[4] **Because the crises that occur as these long-term debt cycles play out happen only once in a lifetime, most people don't expect them.** As a result they typically take people by surprise and do a lot of harm. **The long-term debt cycle that is now in the late-cycle phase was designed in 1944 in Bretton Woods, New Hampshire, and began in 1945, when World War II ended and the dollar/US-dominated world order began.**

These long-term debt cycles are driven by the amount of stimulant left in the central bank's bottle. They start after previously existing excess debts have been restructured and central banks have a full bottle of stimulant. They end when debts are high and the bottle of stimulant is nearly empty or, more specifically, **when the central bank loses its ability to produce money and credit growth that passes through the economic system to produce real economic growth. Throughout history, central governments and central banks have created money and credit, which weakened their own currencies and raised their levels of monetary inflation to offset the deflation that comes from deflationary credit and economic contractions. This typically happens when debt levels are high, interest rates can't be adequately lowered, and the creation of money and credit increases financial asset prices more than it increases actual economic activity. At such times those who are holding the debt (which is someone else's promise to give them currency) typically want to exchange the debt they are holding for other storeholds of wealth. Once it is widely perceived that money and debt assets are no longer good storeholds of wealth, the long-term debt cycle is at its end, and a restructuring of the monetary system has to occur.**

Since these cycles are big deals and have happened virtually everywhere for all of recorded history, we need to understand them and have timeless and universal principles for dealing with them well. But most people, including many economists, don't even acknowledge their existence. That's because to get a sample size of observations that is large and diverse enough to give one a good understanding, one has to have studied them over many hundreds of years in many different countries. In Part II we will do just that, examining the most important of these cycles across history and around the world, with reference to the timeless and universal mechanics of why money and credit work and fail to work as mediums of exchange and storeholds of wealth. In this chapter, I will synthesize all those cases so I can show you how they work archetypically.

I will begin with the basics of the long-term debt cycle from way back when and bring you up to the present, giving you the classic template. To be clear, I'm not saying that all cases transpire exactly like this one, but I am saying that they almost all follow this pattern closely.

THE LONG-TERM DEBT CYCLE

The long-term debt cycle transpires in six stages:

Stage 1: It begins with a) little or no debt and b) money being "hard."

The debt burdens from the last cycle were largely wiped out by restructuring and debt monetization, and because of the consequences of these, particularly inflation, there is a return to hard money like gold and silver (and sometimes copper and other metals like nickel) or sometimes a link to a hard currency. For example, after the destruction of debt and money in Germany's Weimar Republic money became backed by gold-denominated assets and land and pegged to the dollar, and after its destruction in Argentina in the late 1980s money became linked to the dollar.

At this stage, money being "hard" is important because no trust—or credit—is required to carry out an exchange. Any transaction can be settled on the spot, even if the buyer and seller are strangers or enemies. There is an old saying that "gold is the only financial asset that isn't someone else's liability." When you receive gold coins from a buyer, you can melt them down and exchange the metal and still receive almost the same value as if you had spent them, unlike a debt asset like paper money, which is a promise to deliver value (which isn't much of a promise, given how easy it is to print). When countries are at war and there is no trust in their intentions or abilities to pay, they can still pay in gold.

So gold (and, to a lesser extent, silver) can be used as both a safe medium of exchange and a safe storehold of wealth.

Stage 2: Then come claims on hard money (i.e., notes or paper money).

Because carrying a lot of metal money around is risky and inconvenient and creating credit is attractive to both lenders and borrowers, credible parties arise that put the hard money in a safe place and issue paper claims on it. These parties came to be known as "banks," though they initially included all sorts of institutions that people trusted, such as temples in China. **Soon people treat these paper "claims on money" as if they are money itself.** After all, they can be redeemed for tangible money or used to buy things directly. This type of currency system is called a "linked currency system" because the value of the currency is linked to the value of something, typically "hard money," such as gold and silver.

Stage 3: Then comes increased debt.

At first there are the same number of claims on the "hard money" as there is hard money in the bank. Then the holders of paper claims and the banks discover the wonders of credit and debt. Holders of paper claims loan them to banks in exchange for interest payments. The banks like to do that because they can lend the money to others who can pay a higher interest rate, allowing the banks to make a profit. Those who borrow from the bank like it because it gives them buying power they didn't previously have. And the whole society likes it because it leads asset prices and production to rise. Since everyone is happy with how things are going, they do a lot of it. More lending and borrowing happens over and over again many times, there is a boom, and the quantity of the claims on the money (i.e., debt assets) rises relative to the amount of actual goods and services there are to buy. Eventually the claims become much larger than the actual hard money in the bank.

Trouble approaches when there isn't enough income to service one's debts, or when the amount of claims people are holding in the expectation that they can sell them to get money to buy goods and

services increases faster than the amount of goods and services by an amount that makes the conversion from that debt asset (e.g., a bond) impossible. These two problems tend to come together.

Concerning the first of these problems, think of debt as negative earnings and a negative asset that eats up earnings (because earnings have to go to pay it) and eats up other assets (because other assets have to be sold to get the money to pay the debt). It is senior—meaning it gets paid before any other type of asset—so when incomes and the values of assets fall, there is a need to cut expenditures and sell off assets to raise the needed cash. When that's not enough, there needs to be a) debt restructurings (in which debts and debt burdens are reduced, which is problematic for both the debtor and the creditor because one person's debts are another's assets) and/or b) the central bank printing money paired with the central government handing out money and credit to fill in the holes in incomes and balance sheets (which is what is happening now).

Stage 4: Then debt crises, defaults, and devaluations come, which leads to the printing of money and the breaking of the link to hard money.

As for the second problem, this happens when holders of debt don't believe they are going to get adequate returns from it relative to other storeholds of wealth and the costs of goods and services. Debt assets (e.g., bonds) are held by investors who believe they are storeholds of wealth that can be sold to get money, which can be used to buy things. When holders of debt assets try to make the conversion to real money and real goods and services and find out that they can't, a "run" occurs, by which I mean that lots of holders of that debt try to make the conversion to money, goods, services, and other financial assets. The bank, regardless of whether it is a private bank or a central bank, is then faced with the choice of allowing that flow of money out of the debt asset, which will raise interest rates and cause the debt and economic problems to worsen, or of printing money, in the form of issuing bonds and buying enough of the bonds to prevent interest rates from rising and hopefully reverse the run out of them. Inevitably the central bank breaks the link, prints the money, and devalues it because not doing that causes an intolerable deflationary depression. The key at this stage is to create enough money and devaluation to offset the deflationary depression but not so much as to produce an inflationary spiral. When this is done well, I call it a "beautiful deleveraging," which I describe more completely in my book *Principles for Navigating Big Debt Crises*. Sometimes that buying works temporarily; however, if the ratio of claims on money (debt assets) to the amount of "hard" money there is and the quantity of goods and services there is to buy are too high, the bank is in a bind that it can't get out of. It simply doesn't have enough "hard" money to meet the claims. When that happens to a central bank it has the choice either to default or to break the link to the hard money, print the money, and devalue it. Inevitably the central bank devalues. When these debt restructurings and currency devaluations are too big, they lead to the breakdown and possible destruction of the monetary system. The more debt (i.e., claims on money and claims on goods and services) there is, the more it will be necessary to devalue the money.

Remember, there is always a limited amount of goods and services because the amount is constrained by the economy's ability to produce. Also remember that, as shown in our example of paper money being claims on hard money, there is a limited amount of that hard money (e.g., gold on deposit), while the amount of paper money (the claims on that hard money) and debt (the claims on that paper money) is constantly growing. As the amount of paper money claims grows relative to the amount of hard money in the bank and goods and services in the economy, the risk increases that the holders of those debt assets may not be able to redeem them for the amounts of hard money or goods and services that they expect to receive for them.

A bank that can't deliver enough hard money to meet the claims being made on it is in trouble whether it is a private bank or a central bank, though central banks have more options than private banks. That's because a private bank can't print the money or change the laws to make it easier to pay their debts, while some central banks can. **Private banks must either default or get bailed out by the government when they get into trouble, while central banks can devalue their claims (e.g., pay back 50–70 percent) if their debts are denominated in their national currency. If the debt is denominated in a currency that they can't print, then they too must ultimately default.**

Stage 5: Then comes fiat money, which eventually leads to the debasement of money.

Central banks want to stretch the money and credit cycle to make it last for as long as it can because that is so much better than the alternative. So when the system of hard money and claims on hard money becomes too painfully constrictive, governments typically abandon it in favor of what is called "fiat money." No hard money is involved in fiat systems; there is just paper money that the central bank can print without restriction. As a result, there is no risk that the central bank will have its stash of hard money drawn down and have to default on its promises to deliver it. Rather, the risk is that, freed from the constraints on the supply of tangible gold, silver, or some other hard asset, the people who control the printing presses (i.e., the central bankers working with the commercial bankers) will create ever more money and debt assets and liabilities in relation to the amount of goods and services being produced until the time comes when those holding the enormous amount of debt will try to turn it in for goods and services, which will have the same effect as a run on a bank and result in either debt defaults or the devaluation of money.

The shift from a system in which the debt notes are convertible to a tangible asset (e.g., gold and silver) at a fixed rate to a fiat monetary system in which there is no such convertibility last happened in the US on the evening of August 15, 1971. As I mentioned earlier, I was watching on TV when President Nixon told the world that the dollar would no longer be tied to gold. I thought there would be pandemonium with stocks falling. Instead, they rose. Because I had never seen a devaluation before, I didn't understand how it works.

In the years leading up to 1971 the US government had spent a lot of money on military and social programs, then referred to as "guns and butter" policy, that it paid for by borrowing money, which created debt. The debt was a claim on money that could be exchanged for gold. Investors treated this debt as an asset because they got paid interest on it and because the US government promised that it would allow the holders of those notes to exchange them for the gold that was held in US vaults. As the spending and budget deficits grew, the US had to issue much more debt—i.e., create many more claims on gold—even though the amount of gold in the bank didn't increase. Investors who were astute enough to notice could see that the amount of outstanding claims on gold was much larger than the amount of gold in the bank. They realized that if this continued the US would have to default, so they turned in their claims. Of course, the idea that the US government, the richest and most powerful government in the world, would default on its promise to give gold to those who had claims on it seemed implausible at the time. So, while most people were surprised by Nixon's announcement and the effects on the markets, those who understood the mechanics of how money and credit work were not.

When credit cycles reach their limit, it is the logical and classic response for central governments and their central banks to create a lot of debt and print money that will be spent on goods, services, and investment assets in order to keep the economy moving. That was done during the 2008 debt crisis, when interest rates could no longer be lowered because they had already hit 0 percent. It also happened in a big way in 2020 in response to the plunge triggered by the COVID pandemic. That was also done in response to the 1929–32 debt crisis, when interest rates had similarly been driven to 0 percent. At the time I am writing this, the creation of debt and money has been happening in amounts greater than at any time since World War II.

To be clear, printing money and giving it out for spending rather than supporting spending with debt growth is not without its benefits—money spends like credit, but in practice (rather than in theory) it doesn't have to be paid back. There is nothing wrong with having an increase in money growth instead of an increase in credit/debt growth, if the money is put to productive use. The risk is that it will not be. If money is printed too aggressively and it is not used productively, people will stop using it as a storehold of wealth and shift their wealth into other things.

History has shown that ● ***we shouldn't rely on governments to protect us financially***. On the contrary, we should expect most governments to abuse their privileged positions as the creators and users of money and credit for the same reasons that you might commit those abuses if you were in their shoes. That is because no one policy maker owns the whole cycle. Each comes in at one or another part of it and does what is in their interest to do given their circumstances at the time and what they believe is best (including breaking promises, even though the way they collectively handle the whole cycle is bad).

Since early in the debt cycle governments are considered trustworthy and they need and want money as much as or more than anyone else does, they are typically the biggest borrowers. Later in the cycle, new government leaders and new central bankers have to face the challenge of paying back debts with less stimulant in the bottle. To make matters worse, governments also have to bail out debtors whose failures would hurt the system—the "too big to fail" syndrome. As a result, they tend to get themselves into cash flow jams that are much larger than those of individuals, companies, and most other entities.

In virtually every case, the government contributes to the accumulation of debt with its actions and by becoming a large debtor itself. When the debt bubble bursts, the government bails itself and others out by buying assets and/or printing money and devaluing it. The larger the debt crisis, the more that is true. While undesirable, it is understandable why this happens. • ***When one can manufacture money and credit and pass them out to everyone to make them happy, it is very hard to resist the temptation to do so.***[5] It is a classic financial move. **Throughout history, rulers have run up debts that won't come due until long after their own reigns are over, leaving it to their successors to pay the bill.**

Printing money and buying financial assets (mostly bonds) holds interest rates down, which stimulates borrowing and buying. Those investors holding bonds are encouraged to sell them. The low interest rates also encourage investors, businesses, and individuals to borrow and invest in higher-returning assets, getting what they want through monthly payments they can afford.

This leads central banks to print more money and buy more bonds and sometimes other financial assets. That typically does a good job of pushing up financial asset prices but is relatively inefficient at getting money, credit, and buying power into the hands of those who need them most. That is what happened in 2008 and what happened for most of the time until the 2020 coronavirus-induced crisis. When money printing and purchasing of financial assets fail to get money and credit to where they need to go, the central government borrows money from the central bank (which prints it) so the government can spend it on what it needs to be spent on. The Fed announced that plan on April 9, 2020. That approach of printing money to buy debt (called "debt monetization") is vastly more politically palatable as a way of shifting wealth from those who have it to those who need it than imposing taxes because those who are taxed get angry. **That is why central banks always end up printing money and devaluing.**

When governments print a lot of money and buy a lot of debt, they cheapen both, which essentially taxes those who own it, making it easier for debtors and borrowers. When this happens to the point that the holders of money and debt assets realize what is going on, they seek to sell their debt assets and/or borrow money to get into debt they can pay back with cheap money. They also often move their wealth into better storeholds, such as gold and certain types of stocks, or to another country not having these problems. At such times central banks have typically continued to print money and buy debt directly or indirectly (e.g., by having banks do the buying for them) while outlawing the flow of money into inflation-hedge assets, alternative currencies, and alternative places.

Such periods of "reflation" either stimulate a new money and credit expansion that finances another economic expansion (which is good for stocks) or devalue the money so that it produces monetary inflation (which is good for inflation-hedge assets, such as gold, commodities, and inflation-linked bonds). Earlier in the long-term debt cycle, when the amount of outstanding debt isn't large and there is a lot of room to stimulate by lowering interest rates (and failing that, printing money and buying financial assets), there is a strong likelihood that credit growth and economic growth will be good. Later in the long-term debt cycle, when the amount of debt is large and there isn't much room to stimulate, there is a much greater likelihood of monetary inflation accompanied by economic weakness.

While people tend to believe that a currency is pretty much a permanent thing and that "cash" is the safest asset to hold, that's not true. • ***All currencies devalue or die, and when they do, cash and bonds (which are promises to receive currency) are devalued or wiped out.*** **That is because printing a lot of currency and devaluing debt is the most expedient way of reducing or wiping out debt burdens.** When debt burdens are sufficiently reduced or eliminated, the credit/debt expansion cycles can begin again, as described in the next chapter.

As I explained comprehensively in my book *Principles for Navigating Big Debt Crises*, **there are four levers that policy makers can pull to bring debt and debt-service levels down relative to the income and cash flow levels required to service debts**:

1. **Austerity (spending less)**
2. **Debt defaults and restructurings**
3. **Transfers of money and credit from those who have more than they need to those who have less than they need (e.g., raising taxes)**
4. **Printing money and devaluing it**

These levers typically progress from one to another for logical reasons:

- Austerity is deflationary and doesn't last long because it's too painful.
- Debt defaults and restructurings are also deflationary and painful because the debts that are wiped out or reduced in value are someone's assets; as a result, defaults and restructurings are painful for both the debtor who goes broke and has their assets taken away and for the creditor who loses wealth when the debt is written down.
- Transfers of money and credit from those who have more than they need to those who have less than they need (e.g., raising taxes to redistribute wealth) is politically challenging but more tolerable than the first two ways and is typically part of the resolution.
- Compared to the others, ***printing money is the most expedient, least well-understood, and most common big way of restructuring debts.*** In fact, it seems good rather than bad to most people because:
  - It helps to relieve debt squeezes.
  - It's tough to identify any harmed parties that the wealth was taken away from to provide this financial wealth (though they are the holders of money and debt assets).

- In most cases it causes assets to go up in the depreciating currency that people measure their wealth in, so it appears that people are getting richer.

This is what has been happening during the coronavirus crisis as central governments and banks send out large amounts of money and credit. Note that you don't hear anyone complaining about the money and credit creation; in fact, people say that governments would be cheap and cruel if they didn't provide a lot more of it. Hardly anyone acknowledges that governments don't actually have this money to give out. Governments aren't rich entities with piles of money lying around. They are just their people collectively, who will ultimately have to pay for the creation and giving out of money. Now imagine what those same citizens would say if government officials cut expenses to balance their budgets and asked them to do the same, making lots of them go broke, and/or if they sought to redistribute wealth from those who have more to those who have less by raising taxes. The money and credit producing path is much more acceptable politically than either of those options. It's as if you changed the rules of Monopoly to allow the banker to make more money and redistribute it whenever too many players are going broke and getting angry.

Stage 6: Then the flight back into hard money.

When taken too far, the overprinting of fiat currency leads to the selling of debt assets and the earlier-described "bank run" dynamic, which ultimately reduces the value of money and credit, which prompts people to flee out of both the currency and the debt. History teaches us that people typically turn to gold, silver, stocks that maintain their real value, and currencies and assets in other countries not having these problems. Some people think that there has to be an alternative reserve currency to go to for this flight to happen, but that's not true as the same dynamic of the breakdown of the monetary system and the running to other assets has happened in cases in which there was no alternative currency (e.g., in dynastic China and during the Roman Empire). There are a lot of things people run to when money is devalued, including rocks (used for construction) in Germany's Weimar Republic. The debasement of the currency leads people to run from it and from debt denominated in it and into something else.

At this stage of the debt cycle there is typically economic stress caused by large wealth and values gaps. These gaps lead to higher taxes and fighting between the rich and the poor. This also makes those with wealth want to move to hard assets, other currencies, and other countries. Naturally those who are governing the countries that are suffering from this flight from their debt, their currency, and their country want to stop it. So governments make it harder to invest in assets like gold (by outlawing gold transactions and ownership, for example), foreign currencies (via eliminating the ability to transact in them), and foreign countries (by establishing foreign exchange controls to prevent money from leaving the country). Eventually the debt is largely wiped out, usually by making the money to pay it back plentiful and cheap, which devalues both the money and the debt.

When the devaluations and defaults become so extreme that the money and credit system breaks down, necessity generally compels governments to go back to some form of hard currency to rebuild people's faith in the value of money as a storehold of wealth. Quite often, though not always, the government links its money to gold or a hard reserve currency with a promise to allow holders of that new money to convert it to the hard money. Sometimes that hard money is another country's. For example, over the past decades many weak-currency countries have linked their money to the US dollar or simply dollarized their economy (i.e., used the dollar as their own medium of exchange and storehold of wealth).

To review, holding debt as an asset that provides interest is typically rewarding early in the long-term debt cycle when there isn't a lot of debt outstanding, but holding debt late in the cycle, when there is a lot of debt outstanding and it is closer to being defaulted on or devalued, is risky relative to the interest rate being given. So, holding debt is a bit like holding a ticking time bomb that rewards you while it is still ticking and blows you up when it stops. And as we've seen, that big blowup (i.e., big default or big devaluation) happens something like once every 50 to 75 years.

These cycles of building debts and writing off debts have existed for thousands of years and in some cases have been institutionalized. For example, the Old Testament describes a year of Jubilee every 50 years, in which debts were forgiven. Knowing that the debt cycle would happen on that schedule allowed everyone to act in a rational way to prepare for it.

Helping you understand this debt cycle so that you are prepared for it, rather than surprised by it, is my main objective in writing this book.

Ironically, **the closer most people are to the blowup, which is also when the claims outstanding are largest relative to the amount of hard money and tangible wealth there is, the riskier the situation is but the safer people tend to feel**. **That is because they have held the debt and enjoyed the rewards of doing so. The longer it has been since the last blowup, the more people's memories of it have faded**—even as the risks of holding the debt rise and the rewards for holding it decline. To properly assess the risk/reward of holding the time bomb, one must remain constantly aware of the amount of debt that needs to be paid relative to the amount of hard money there is to pay it, the amount of debt payments that have to be made relative to the amount of cash flow the debtors have, and the amount of interest they bring in.

THE LONG-TERM DEBT CYCLE IN SUMMARY

For thousands of years, there have always been three types of monetary systems:

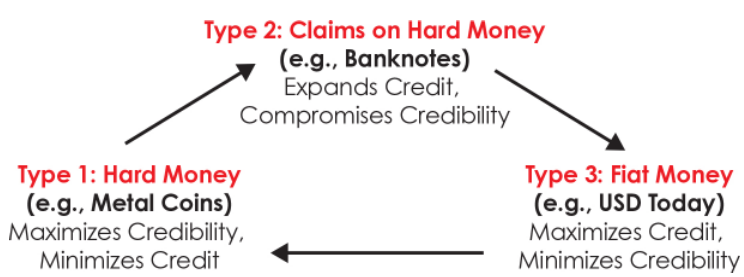
Type 1: Hard money (e.g., metal coins)
Type 2: Paper money (claims on hard money)
Type 3: Fiat money

Hard money is the most restrictive system because money can't be created unless the supply of the metal or other intrinsically valuable commodity that is the money is increased. Money and credit are more easily created in the second type of system, so the ratio of the claims on hard money to the actual hard money held rises, which eventually leads

to a run on the banks. The result is a) defaults, when the bank closes its doors and depositors lose their hard assets, and/or b) devaluations of the claims on money, which mean depositors get back less. In the third type of system, governments can create money and credit freely, which works for as long as people continue to have confidence in the currency and fails when they no longer do.

Throughout history, countries have transitioned across these different types of systems for logical reasons. When a country needs more money and credit than it currently has, whether to deal with debts, wars, or other problems, it naturally moves from Type 1 to Type 2, or Type 2 to Type 3, so that it has more flexibility to print money. Then creating too much money and debt depreciates their value, causing people to get out of holding debt and money as a storehold of wealth and move back into hard assets (like gold and silver) and other currencies. Since this typically takes place when there is wealth conflict and sometimes war, there is also typically a desire to get out of the country. Such countries need to re-establish confidence in their currency as a storehold of wealth before they can restore their credit markets.

The following diagram conveys these different transitions. There are many historical examples, from the Song Dynasty in China to Weimar Germany, of countries making the full transition from constrained types of monetary systems (Type 1 and Type 2) to fiat money (Type 3), then back to a constrained currency as the fiat currency hyperinflates.



This big cycle typically plays out over something like 50 to 75 years; its ending is characterized by a restructuring of debts and the monetary system itself. The abrupt parts of these restructurings—i.e., the periods

of debt and currency crisis—typically happen quickly, lasting only a few months to up to three years, depending on how long it takes the government to act. However, their ripple effects can be long-lasting, for example, when a currency ceases to be a reserve currency. Within each of these currency regimes there are typically two to four big debt crises—i.e., big enough to cause banking crises and debt write-downs or devaluations of 30 percent or more—but not big enough to break the currency system. Because I have invested in many countries for nearly half a century, I have experienced dozens of them. They all run the same way, which I explain in greater depth in my book *Principles for Navigating Big Debt Crises*.

In the next chapter, I will go into more detail on the causes of and risks associated with money changing its value, showing what has happened in the past, which is pretty shocking.

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[1] You can find more of my perspective on this in several papers at economicprinciples.org.

[2] While borrowers are typically willing to pay interest, which is what gives lenders the incentive to lend, nowadays there are some debt assets that have negative interest rates, which is a weird story that we will explore later.

[3] Monetized means the central bank's creation of money to buy debt.

[4] By the way, please understand that these rough estimates of cycle times are just rough estimates, and to know where we are in these cycles we need to look more at the conditions than the amount of time.

[5] Some central banks have made acting on this temptation harder by separating themselves from the direct control of politicians, but virtually every central bank has to bail out their government at some point, so devaluations always happen.

CHAPTER 4

THE CHANGING VALUE OF MONEY

This chapter examines the concepts introduced in the prior chapter in a more granular way to show you how consistent they are with the actual cases they are derived from. While we will get a bit more into the mechanics here than we did in Chapter 3, I have written this chapter in a way that should be accessible to the general reader and, at the same time, precise enough to satisfy the needs of skilled economists and investors.

As previously explained, there is a real economy and there is a financial economy, and the two are closely entwined but different. Each has its own supply-and-demand dynamics. In this chapter we will focus on the supply-and-demand dynamics of the financial economy to explore what determines the value of money.

Most people worry about whether their assets are going up or down; they rarely pay much attention to the value of their currency. Think about it. How worried are you about your currency declining? And how worried are you about how your stocks or your other assets are doing? If you are like most people, you are not nearly as aware of your currency risk as you need to be.

So, let's explore currency risks.

ALL CURRENCIES ARE DEVALUED OR DIE

Of the roughly 750 currencies that have existed since 1700, only about 20 percent remain, and all of them have been devalued. If you went back to 1850, as an example, the world's major currencies wouldn't look anything like the ones today. While the dollar, pound, and Swiss franc existed in 1850, the most important currencies of that era have died. In what is now Germany, you would have used the gulden or the thaler. There was no yen, so in Japan you might have used the koban or the ryo instead. In Italy you would have used one or more of six currencies. You would have used different currencies in Spain, China, and most other countries as well. Some were completely wiped out (in most cases they were in countries that had hyperinflation and/or lost wars and had large war debts) and replaced by entirely new currencies. Some were merged into currencies that replaced them (e.g., the individual European currencies were merged into the euro). And some remain in existence but were devalued, like the British pound and the US dollar.

WHAT DO THEY DEVALUE AGAINST?

The goal of printing money is to reduce debt burdens, so the most important thing for currencies to devalue against is debt (i.e., increase the amount of money relative to the amount of debt, to make it easier for debtors to repay). Debt is a promise to deliver money, so giving more money to those who need it lessens their debt burden. Where this newly created money and credit then flow determines what happens next. **In cases in which debt relief facilitates the flow of this money and credit into productivity and profits for companies, real stock prices (i.e., the value of stocks after adjusting for inflation) rise.**

When the creation of money sufficiently hurts the actual and prospective returns of cash and debt assets, it drives flows out of those assets and into inflation-hedge assets like gold, commodities, inflation-indexed bonds, and other currencies (including digital). This leads to a self-reinforcing decline in the value of money. At times when the central bank faces the choice between allowing real interest rates (i.e., the rate of interest minus the rate of inflation) to rise to the detriment of the economy (and the anger of most of the public) or preventing real interest rates from rising by printing money and buying those cash and debt assets, they will choose the second path. This reinforces the bad returns of holding cash and those debt assets.

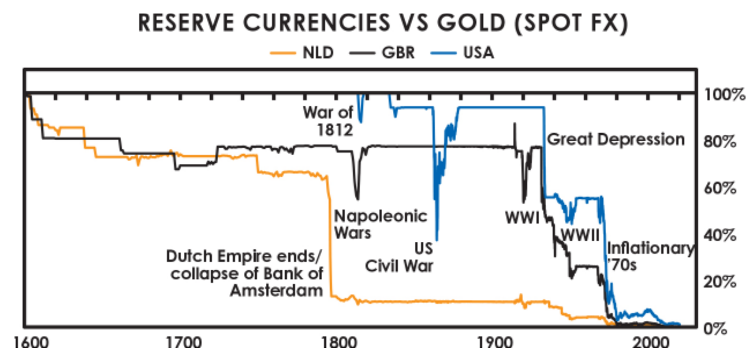
The later in the long-term debt cycle this happens, the greater the likelihood there will be a breakdown in the currency and monetary system. This breakdown is most likely to occur when the amounts of debt and money are already too large to be turned into real value for the amounts of goods and services they are claims on, the level of real interest rates that is low enough to save debtors from bankruptcy is below the level required for creditors to hold the debt as a viable storehold of wealth, and the normal central bank levers of allocating capital via interest rate changes (which I call Monetary Policy 1, or MP1) and/or printing money and buying high-quality debt (Monetary Policy 2, or MP2) don't work. This turns monetary policy into a facilitator of a political system that allocates resources in an uneconomic way.

There are systemically beneficial devaluations (though they are always costly to holders of money and debt), and there are systemically destructive ones that damage the credit/capital allocation system but are needed to wipe out debt in order to create a new monetary order. It's important to be able to tell the difference.

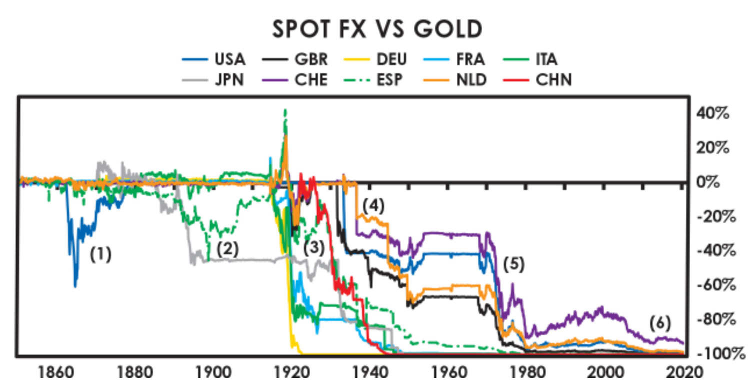
To do that I will start by showing how the values of currencies have changed in relation to both gold and consumer-price-index-weighted baskets of goods and services. These are relevant comparisons because gold is the timeless and universal alternative currency, while money is meant to buy goods and services so its buying power is of paramount importance. I will also touch on how a currency's value changes in relation to other currencies/debt and in relation to stocks because they too can be storeholds of wealth. The picture that all these measures convey is broadly similar when a devaluation is big enough. Many other things (real estate, art, etc.) are also alternative storeholds of wealth, but gold will make my point nicely.

IN RELATION TO GOLD

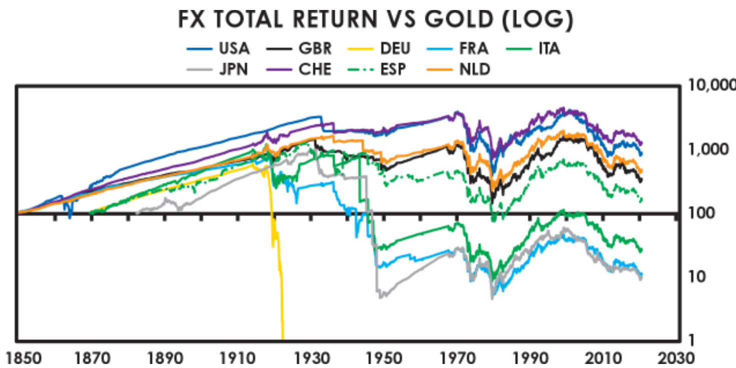
This chart shows spot exchange rates of the three major reserve currencies in relation to gold since 1600. We will examine all of this in depth later. For now I would like to focus on both the spot currency returns and the total returns of interest-earning cash in all the major currencies since 1850.



As the next two charts show, devaluations typically occur fairly abruptly during debt crises that are separated by longer periods of prosperity and stability. I noted six devaluations, but of course there were many more of minor currencies.



To properly compare the returns of holding cash in a currency to gold, we have to take into account the interest one would earn on cash. This chart shows the total return (i.e., price changes plus interest earned) on cash in each major currency versus gold.



[1]

Here are the most notable takeaways:

- **Big devaluations are abrupt and episodic rather than evolutionary.** Over the last 170 years, there were six time frames when really big devaluations of major currencies occurred (and plenty more of minor currencies).
- In the 1860s, during its civil war, the US suspended gold convertibility and printed paper money (known as "greenbacks") to help monetize war debts.
- Around the time the US returned to its gold peg in the mid-1870s, a number of other countries joined the gold standard; most currencies remained fixed against it until World War I. Major exceptions were Japan (which was on a silver-linked standard until the 1890s, which led its exchange rate to devalue against gold as silver prices fell during this period) and Spain, which frequently suspended convertibility to support large fiscal deficits.
- During World War I, warring countries ran enormous deficits that were funded by central banks' printing and lending of money. Gold served as money in foreign transactions, as international trust (and hence credit) was lacking. When the war ended, a new monetary order was created with gold and the winning countries' currencies, which were tied to gold.
- Still, between 1919 and 1922 several European countries, especially those that lost the war, were forced to print and devalue their currencies. The German mark and German mark debt sank between 1920 and 1923.

Some of the winners of the war also had debts that had to be devalued to create a new start.

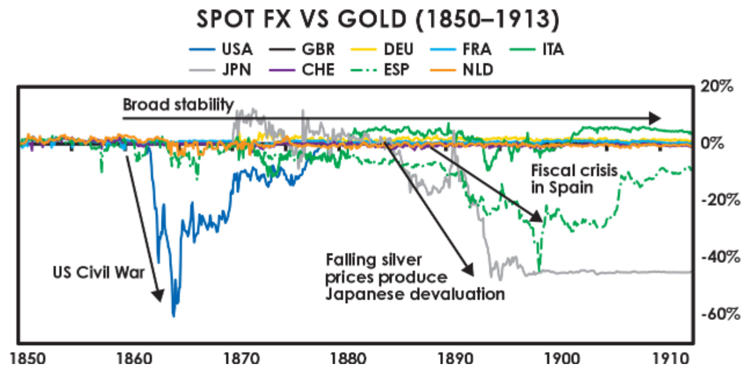
- With debt, domestic political, and international geopolitical restructurings done, the 1920s boomed, particularly in the US, inflating a debt bubble.
- The debt bubble burst in 1929, requiring central banks to print money and devalue it throughout the 1930s. More money printing and more money devaluations were required during World War II to fund military spending.
- In 1944–45, as the war ended, a new monetary system that linked the dollar to gold and other currencies to the dollar was created. The currencies and debts of Germany, Japan, and Italy, as well as those of China and a number of other countries, were quickly and totally destroyed, while those of most winners of the war were slowly but still substantially depreciated. This monetary system stayed in place until the late 1960s.
- In 1968–73 (most importantly in 1971), excessive spending and debt creation (especially by the US) required breaking the dollar's link to gold because the claims on gold that were being turned in were far greater than the amount of gold available to redeem them.
- That led to a dollar-based fiat monetary system, which allowed the big increase in dollar-denominated money and credit that fueled the inflation of the 1970s and led to the debt crisis of the 1980s.
- Since 2000, the value of money has fallen in relation to the value of gold due to money and credit creation and because interest rates have been low in relation to inflation rates. Because the monetary system has been free-floating, it hasn't experienced the abrupt breaks it did in the past; the devaluation has been more gradual and continuous. Low, and in some cases negative, interest rates have not provided compensation for the increasing amount of money and credit and the resulting (albeit low) inflation.

Now let's take a closer look at these events:

The returns from holding currencies (in short-term debt that collects interest) were generally profitable between 1850 and 1913 relative to the returns from holding gold. Most currencies were able to remain fixed against gold or silver, and lending and borrowing worked well for those who did it. That prosperous period is called the Second Industrial Revolution, when borrowers turned the money they borrowed into earnings that allowed their debts to be paid back at high interest rates. Times were turbulent nevertheless. For example, in the early 1900s in the US, a debt-financed speculative boom in stocks grew overextended, causing a banking and brokerage crisis. That led to the Panic of 1907, at the same time that the large wealth gap and other social issues (e.g., women's suffrage and trade unionization) were causing political tensions. **Capitalism was challenged, and taxes started to rise to fund the wealth redistribution process.** Both the Federal Reserve and the US federal income tax were instituted in 1913.

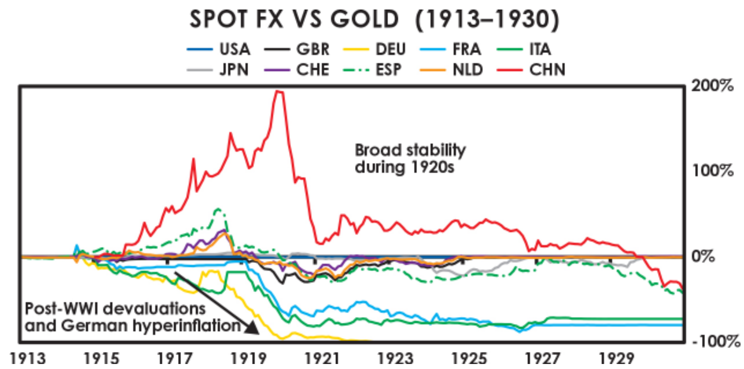
Though a world away, China was impacted by the same dynamic. A stock market bubble led by rubber production stocks (China's equivalent of the railroad stock bubbles that contributed to panics in the US throughout the 19th century) burst in 1910, causing the crash that some have described as a factor in the debt/money/economic downswing that brought about the end of Imperial China.

But throughout most of that period, Type 2 monetary systems (i.e., those with notes convertible into metal money) remained in place in most countries, and the holders of those notes got paid good interest rates without having their currencies devalued. The big exceptions were the US devaluation to finance its civil war debts in the 1860s, the frequent devaluations of Spain's currency due to its weakness as a global power, and the sharp devaluations in Japan's currency due to its remaining on a silver-linked standard until the 1890s, while silver prices were falling relative to gold.

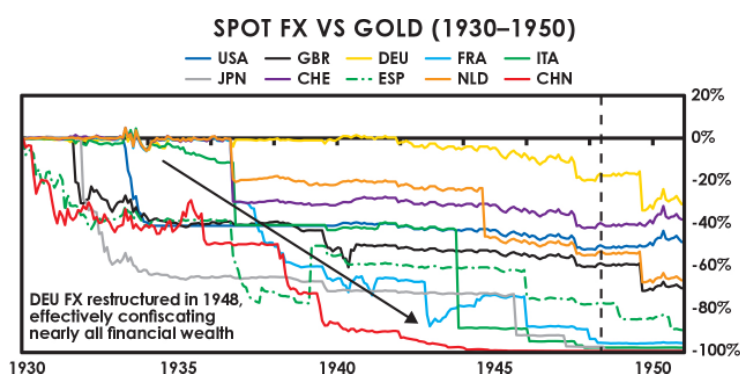


When World War I began in 1914, countries borrowed a lot to fund it. This led to the late-debt-cycle breakdowns and devaluations that came when war debts had to be wiped out, effectively destroying the monetary systems of the war's losers. The Paris Peace Conference that ended the war in 1918 attempted to institute a new international order around the League of Nations, but those efforts at cooperation could not forestall the debt crises and monetary instability caused by the huge war indemnities that were placed on the defeated powers, as well as the large war debts that the victorious Allied powers owed each other (particularly the US).

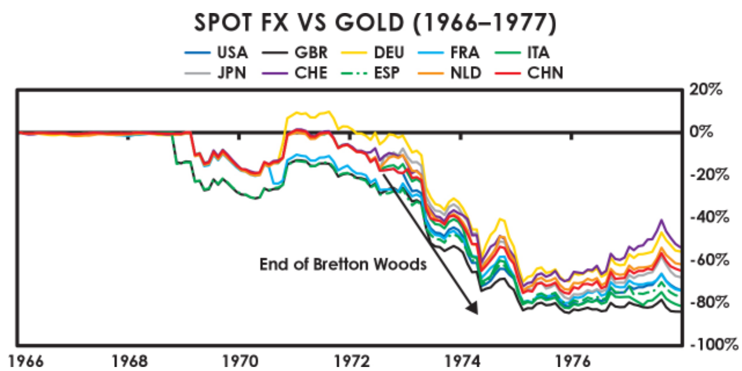
Germany suffered a complete wipeout of the value of money and credit, which led to the most iconic hyperinflation in history during the Weimar Republic (which I describe in great detail in *Principles for Navigating Big Debt Crises*). The Spanish flu pandemic also occurred during the period, beginning in 1918 and ending in 1920. **With the exception of the US, virtually every country devalued its currency because they had to monetize some of their war debts.** Had they not done so, they wouldn't have been able to compete in world markets with the countries that did. China's silver-based currency rallied sharply relative to gold (and gold-linked currencies) near the end of the war as silver prices rose, and then mechanically devalued as silver prices fell sharply amid the post-war deflation in the US. **That period of war and devaluation that established the new world order in 1918 was followed by an extended and productive period of economic prosperity, particularly in the US, known as the Roaring '20s. Like all such periods, it led to big debt and asset bubbles and large wealth gaps.**



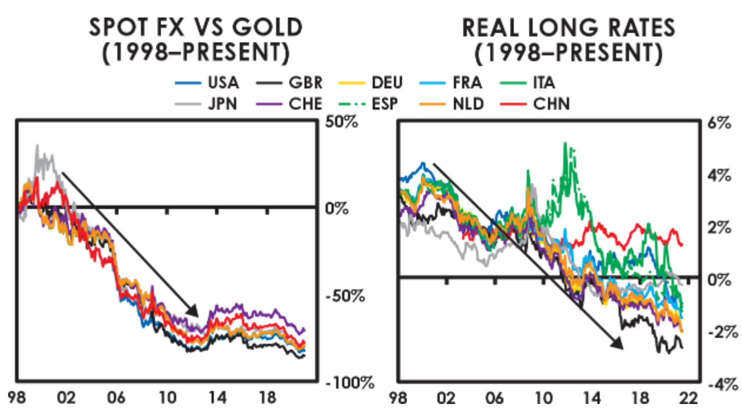
Different versions of the same thing happened during the 1930s. Between 1930 and 1933, a global debt crisis caused economic contractions that led to money printing and competitive devaluations in virtually every country, eroding the value of money moving into World War II. Conflicts over wealth within countries led to greater conflicts between them. All the warring countries built up war debts while the US gained a lot of wealth in the form of gold during the war. **Then, after the war, the value of money and debt was completely wiped out for the losers (Germany, Japan, and Italy) as well as for China, and was severely devalued for the UK and France, even though they were among the winners. A new world order and a period of prosperity followed the war.** We won't examine it, other than to mention that the excessive borrowing that took place set in motion the next big devaluation, which happened between 1968 and 1973.



By the mid-1950s, the dollar and the Swiss franc were the only currencies worth even half of their 1850s exchange rate. As shown in the following chart, the downward pressure on currencies and upward pressure on gold started in 1968. **On August 15, 1971, President Nixon ended the Bretton Woods monetary system, devaluing the dollar and leaving the monetary system in which the dollar was backed by gold and instituting a fiat monetary system. (I will cover this episode in more detail in Chapter 11.)**



Since 2000, we have seen a more gradual and orderly loss of total return in currencies when measured in gold, consistent with the broad fall in real rates across countries.



In summary:

- The average annual return of interest-earning cash currency between 1850 and the present was 1.2 percent, which was a bit higher than the average real return of holding gold, which was 0.9 percent, though there were huge differences in returns at various periods of time and in various countries.

- You would have received a positive real return for holding bills in about half of the countries during that period and a negative real return in the other half. In the case of Germany, you would have been totally wiped out twice.
- Most of the real returns from holding interest-earning cash currency would have come in the periods of prosperity, when most countries were on gold standards that they adhered to (e.g., during the Second Industrial Revolution, when debt levels and debt-service burdens were relatively low and income growth was nearly equal to debt growth).
- The real return for bills since 1912 (the modern fiat era) has been -0.1 percent. The real return of gold during this era has been 1.6 percent. You would only have made a positive real return holding interest-earning cash currency in about half of the countries during this era, and you would have lost meaningfully in the rest (over 2 percent a year in France, Italy, and Japan, and over 18 percent a year in Germany, due to the hyperinflation).

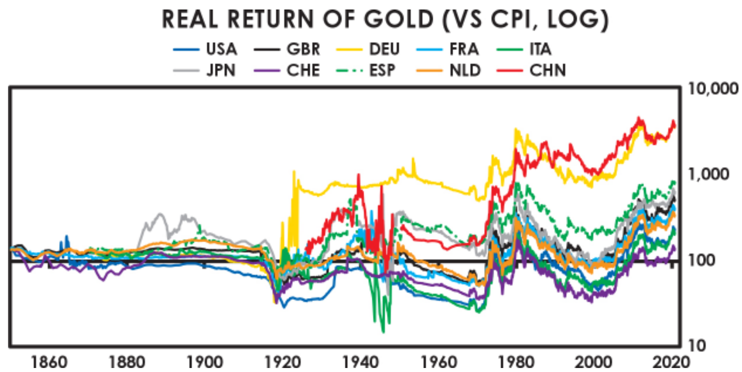
CURRENCY AND GOLD REAL RETURNS OF MAJOR COUNTRIES SINCE 1850 (VS CPI, ANN)

Country	Real Returns (vs CPI), Ann					
	1850–Present		1850–1912		1912–Present	
	Continuous Govt Bill Investment	Gold	Continuous Govt Bill Investment	Gold	Continuous Govt Bill Investment	Gold
United Kingdom	1.4%	0.7%	3.1%	-0.1%	0.5%	1.1%
United States	1.6%	0.3%	3.6%	-1.0%	0.4%	1.0%
Germany	-12.9%	2.0%	3.0%	-0.9%	-18.2%	3.1%
France	-0.7%	0.6%	2.6%	-0.3%	-2.6%	1.1%
Italy	-0.6%	0.3%	4.7%	-0.5%	-2.6%	0.5%
Japan	-0.7%	1.0%	5.0%	0.4%	-2.2%	1.2%

Country	Real Returns (vs CPI), Ann					
	1850–Present		1850–1912		1912–Present	
	Continuous Govt Bill Investment	Gold	Continuous Govt Bill Investment	Gold	Continuous Govt Bill Investment	Gold
Switzerland	1.5%	0.0%	3.4%	-0.5%	0.5%	0.3%
Spain	1.4%	1.1%	4.5%	0.1%	0.3%	1.5%
Netherlands	1.4%	0.5%	3.3%	0.0%	0.4%	0.7%
China	–	3.3%	–	–	–	3.3%
Average	1.2%	0.9%	3.6%	-0.3%	-0.1%	1.6%

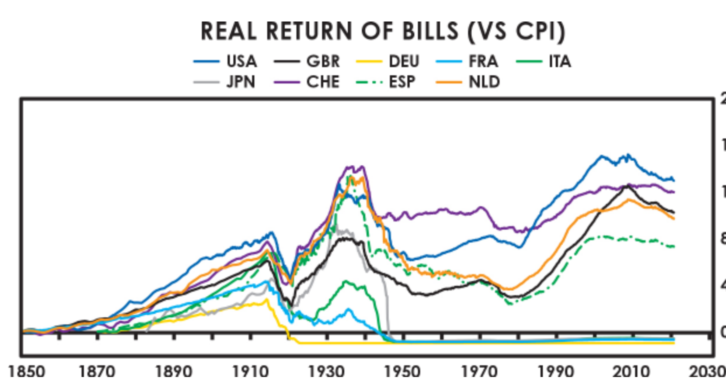
Data for Switzerland is since 1851; data for Germany, Spain, and Italy is since 1870; data for Japan is since 1882; data for China is since 1926 (excluding 1948–50). Average return is un-rebalanced and doesn't include China.

The next chart shows the real returns from holding gold between 1850 and the present. From 1850 to 1971, gold returned (through its appreciation) an amount that roughly equaled the amount of money lost to inflation on average, though there were big variations around that average both across countries (e.g., Germany seeing large gold outperformance, while countries with only limited devaluations, like the US, saw gold prices not keep up with inflation) and across time (e.g., the 1930s currency devaluations and the World War II-era devaluations of money that were part of the formation of the Bretton Woods monetary system in 1944). After the war, gold stayed steady in price across most countries, while money and credit expanded until 1971. Then, in 1971, there was a shift from a Type 2 monetary system (notes backed by gold) to a Type 3 fiat monetary system. That delinking of currencies from gold gave central banks the unconstrained ability to create money and credit. That led to high inflation and low real interest rates, which led to the big appreciation in the real gold price until 1980–81, when interest rates were raised significantly above the inflation rate, leading currencies to strengthen and gold to fall until 2000. That is when central banks pushed interest rates down relative to inflation rates and, when they couldn't push rates any lower by normal means, printed money and bought financial assets, which supported gold prices.



THE VALUE OF CURRENCIES IN RELATION TO GOODS AND SERVICES

Thus far we have looked at the market values of currencies in relation to the market value of gold. That raises the question as to whether gold is an appropriate gauge of value. **The next chart shows the value of interest-earning currency in terms of the consumer price index (CPI) baskets of goods and services in those currencies, reflecting their changes in buying power.** As can be clearly seen, the two World Wars were very bad and there have been ups and downs in the years since. For about half of the currencies, interest-earning cash provided a return above the rate of inflation. For the other half it provided negative real returns. In all cases, there were big and roughly 10-year-long swings around those averages. In other words, **history has shown that there are very large risks in holding interest-earning cash currency as a storehold of wealth, especially late in debt cycles**.



THE PATTERNS OF COUNTRIES DEVALUING AND LOSING THEIR RESERVE CURRENCY STATUS

A currency devaluing and a currency losing its reserve currency status aren't necessarily the same, though both are caused by debt crises. The loss of reserve currency status is a product of chronic large devaluations. As previously explained, increasing the supply of money and credit reduces the value of money and credit. This is bad for holders of money and credit but a relief to debtors. When this debt relief allows money and credit to flow into productivity and profits for companies, real stock prices rise. But it can also damage the actual and prospective returns of cash and debt assets enough to drive people out of them and into inflation-hedge assets and other currencies. The central bank then prints money and buys cash and debt assets, which reinforces the bad returns of holding them. The later in the long-term debt cycle this happens, the greater the likelihood that there will be a breakdown in the currency and monetary system. Policy makers and investors must be able to tell the difference between systemically beneficial devaluations and systemically destructive ones.

What do these devaluations have in common?

- **All the economies in the major cases that we examine in depth in Part II experienced a classic "run" dynamic, in which there were more claims on the central bank than there was hard currency available to satisfy them.** That hard currency was typically gold, though it was US dollars for the UK reserve currency decline because at that time the pound was linked to the dollar.
- **Net central bank reserves start falling prior to the actual devaluation, in some cases years ahead.** It's also worth noting that in several cases countries suspended convertibility before the actual devaluation of the exchange rate. The UK did this in 1947 and ahead of the 1949 devaluation, and the US did it in 1971.

- **The run on the currency and the devaluations typically occur alongside significant debt problems**, often related to wartime spending (e.g., the Fourth Anglo-Dutch War for the Netherlands, the World Wars for the UK, and the Vietnam War for the US), which put pressure on the central bank to print. The worst situations are when countries lose wars; that typically leads to the total collapse and restructuring of their currencies and their economies. However, winners of wars that end up with debts much larger than their assets and reduced competitiveness (e.g., the UK after the World Wars) also lose their reserve currency status, though more gradually.
- **Typically, central banks initially respond by letting short-term rates rise, but that is too economically painful, so they quickly capitulate and increase the supply of money.** After the money devalues, they typically cut rates.
- **Outcomes diverge significantly across the cases, with a key variable being how much economic and military power the country retains at the time of the devaluation.** The more it has, the more willing savers are to continue holding their money there. More specifically for the major reserve currencies:
  - For the Dutch, the collapse of the guilder was massive and relatively quick; it took place over less than a decade, with the actual circulation of guilders falling swiftly by the end of the Fourth Anglo-Dutch War in 1784. The collapse came as the Netherlands entered a steep decline as a world power, first losing to the British and subsequently facing invasion from France.
  - For the UK, the decline was more gradual: it took two devaluations before it fully lost its reserve currency status after Bretton Woods, though it experienced periodic balance of payments strains over the intervening period. Many who held reserves in pounds continued to do so because of political pressures, and their assets significantly underperformed US assets during the same time.
  - In the case of the US, there were two big abrupt devaluations (in 1933 and 1971) and more gradual devaluations against gold since 2000, but

they haven't cost the US its reserve currency status.

- Typically, a country loses its reserve currency status when there is an already established loss of economic and political primacy to a rising rival, which creates a vulnerability (e.g., the Netherlands falling behind the UK, or the UK falling behind the US), and there are large and growing debts monetized by the central bank printing money and buying government debt. This leads to a weakening of the currency in a self-reinforcing run that can't be stopped because the fiscal and balance of payments deficits are too great for any cutbacks to close.

In Part II, we will see the last 500 years of history as one continuous story of rises and declines of empires and the reasons for them, and you will see the same cause/effect relationships driving the rises and declines. But first we need to explore the big cycles of internal and external order/disorder, which we will do in the next two chapters.

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[1] Due to a lack of data, several charts in this chapter do not show China.

CHAPTER 5

THE BIG CYCLE OF INTERNAL ORDER AND DISORDER

How people are with each other is the primary driver of the outcomes they get. Within countries there are systems or "orders" for governing how people are supposed to behave with each other. These systems and the actual behaviors of people operating within them produce consequences. In this chapter, we will explore the timeless and universal cause/effect relationships that shape the internal orders and the behaviors that drive the shifts between periods of order and periods of disorder.

Through my research, I saw how changes in internal orders (i.e., countries' systems for governing internally) and changes in the world order (i.e., the systems determining power between countries) happen continuously and everywhere in similar and increasingly interconnected ways that flow together as one all-encompassing story from the beginning of recorded time up to this moment. Seeing many interlinking cases evolve together helped me to discover the patterns that govern them and to imagine the future based on what I've learned. Most importantly I saw how the constant struggle for wealth and power produced continuously evolving internal systems/orders and external systems/orders and saw how these internal and external orders affect each other—with the whole thing (i.e., the world order) working like a perpetual-motion machine that evolves while doing the same things over and over again for basically the same reasons.

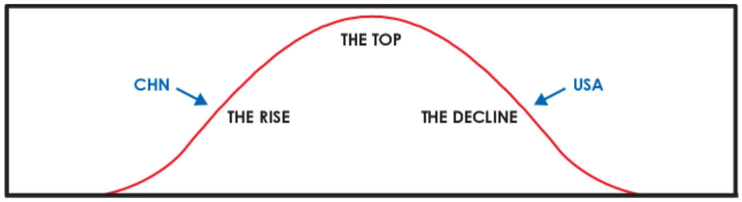
● ***The biggest thing affecting most people in most countries through time is how people struggle to make, take, and distribute wealth and power, though they also struggle over other things, most importantly ideology and religion.*** **I saw how these struggles happened in timeless and universal ways, and how these struggles had huge**

implications for all aspects of people's lives, starting with what happened with taxes, the economy, and how people were with each other through periods of boom and bust and peace and war, and how they unfolded in cyclical ways, like the tide coming in and out.

I saw that when these struggles took the form of healthy competition that encouraged human energy to be put into productive activities, they produced productive internal orders and prosperous times, and when those energies took the form of destructive internal fighting, they produced internal disorder and painfully difficult times. I saw why the swings between productive order and destructive disorder typically evolved in cycles driven by logical cause/effect relationships and how they happened in all countries for mostly the same reasons. I saw that those that rose to achieve greatness did so because of a confluence of key forces coming together to produce that greatness and those that declined did so because these forces dissipated.

At the time of this writing, there is growing disorder in a number of leading countries around the world, most importantly in the United States. I wanted to put that disorder into perspective so I built indices of it and conducted the research I am sharing in this chapter. Because how the US handles its disorder will have profound implications for Americans, others around the world, and most economies and markets, in this chapter I am focusing more on the US than on other countries.

This simplified chart shows approximately where the US and China are within the archetypical Big Cycle, as measured by the previously described determinants. The US is in the stage—which I call Stage 5—when there are bad financial conditions and intensifying conflict at the same time the leading empire still has other great strengths (e.g., technology and military) that are declining on a relative basis. Classically this stage comes after periods of great excesses in spending and debt and the widening of wealth and political gaps and before there are revolutions and civil wars.



To be clear, I am not saying that the United States or other countries are inevitably headed into a period of greater decline or more internal and external conflict. However, I am saying that it is important to watch the markers in order to understand both what is happening and the full range of possibilities for the period ahead. In this chapter, I explore those markers by drawing on the lessons from analogous historical cases.

THE SIX STAGES OF THE INTERNAL CYCLE

Internal orders typically (though not always) change through a relatively standard sequence of stages, like the progression of a disease. By looking at their symptoms we can tell which stages countries are in. For example, just as Stage 3 cancer is different from Stage 4 cancer in ways defined by different conditions that exist and have come about as a result of things that happened in prior stages, the same is true for the different stages of the big internal cycle. Like diseases, different conditions warrant different actions to address them and they produce a different range of probabilities that those actions will lead to. For example, an old, unhealthy set of circumstances produces a range of possibilities and warrants different actions than a young, healthy set. **As with cancer, it is best to stop the progress before getting into the later stages.**

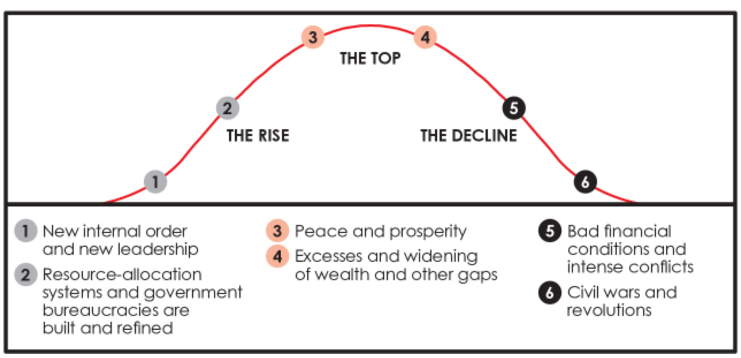
From studying history it appears to me that the stages of the archetypical cycle from internal order to internal disorder and back are as follows:

- **Stage 1, when the new order begins and the new leadership consolidates power**, which leads to…
- … **Stage 2, when the resource-allocation systems and government bureaucracies are built and refined**, which if done well leads to…

- ... **Stage 3, when there is peace and prosperity**, which leads to...
- ... **Stage 4, when there are great excesses in spending and debt and the widening of wealth and political gaps**, which leads to...
- ... **Stage 5, when there are very bad financial conditions and intense conflict**, which leads to...
- ... **Stage 6, when there are civil wars/revolutions**, which leads to...
- ... Stage 1, which leads to Stage 2, etc., with the whole cycle happening over again.

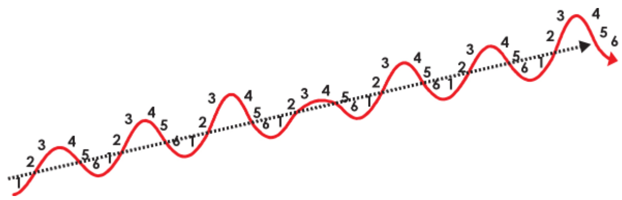
Each stage presents a different set of conditions that the people facing them have to deal with. Some of these circumstances are much more difficult than others to resolve. For example, early in the long-term debt cycle, when there is plenty of capacity for governments to create debt to finance spending, it is easier to deal with the circumstances at hand than late in the long-term debt cycle when there is little or no capacity to create money and credit to finance spending. For these reasons the range of possible paths forward and the challenges that leaders face depend on where in the cycle a country is. These different stages present different challenges that require different qualities, understandings, and skills from leaders in order to effectively deal with them.[1] How well those facing these circumstances—e.g., you facing your circumstances and our leaders facing our collective circumstances—understand and adapt to them affects how good or bad the outcomes will be within the range of possibilities that exist given the circumstances. Different cultures have established different ways of approaching these circumstances. Those leaders and cultures who understand them and can adapt to their circumstances will produce much better outcomes than those who don't. That is where timeless and universal principles come in.

While the length of time spent in each of these stages can vary a lot, the evolution through them generally takes 100 years, give or take a lot and with big undulations within the cycle. Like evolution in general, the evolution of internal orders occurs in a cyclical way in which one stage typically leads to the next through a progression of stages that repeat and, in the process, evolve to higher levels of development. For example, Stage 1 (when the new internal order is created by new leaders who came to power via a civil war/revolution) normally comes after Stage 6 (when there is a civil war/revolution, which is the low point in the cycle), which leads to the next stage and so on up to Stage 3 (which is the high point in the cycle because there is a lot of peace and prosperity in that stage), which gets overdone in Stages 4 and 5 and so on, leading to the next new order (Stage 1). That happens over and over again in an upward-evolving way. Again, that archetypical cycle typically takes 100 years, give or take a lot. Within each cycle there are similar, smaller cycles. For example, there is a short-term debt cycle that leads to bubbles and recessions that come along roughly every eight years, there are political cycles that move political control between the right and the left that come along with roughly equal frequency, etc. **Every country is now going through them, and many of them are in different stages. For example, China and India are in very different stages than the United States and most European countries. Which stages countries are in versus other countries affects the relations between countries and is the primary determinant of the world order. We will explore all of this in the last chapter of this book. The cycle's archetypical evolution transpires as shown in the following diagram.**

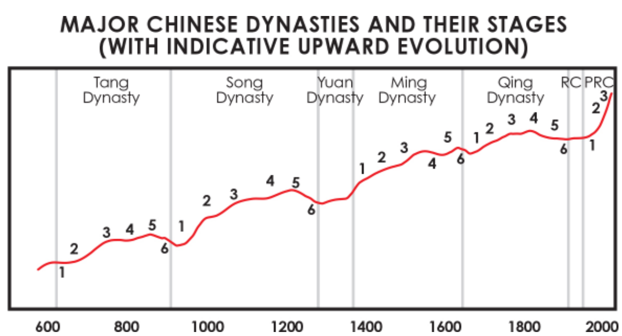


That is the complete internal order cycle. But of course the cycle repeats, with new leaders replacing the old ones and the whole cycle beginning again. How quickly a nation is able to rebuild and achieve new heights of prosperity depends on 1) how severe the civil war/revolution that ended the prior cycle was and 2) how competent the leaders of the new cycle are at establishing the things required for success.

These cycles have taken place for as long as there has been recorded history (and probably before), so many cycles are linked together, and they are upward-sloping because of evolutionary gains that are made over time.

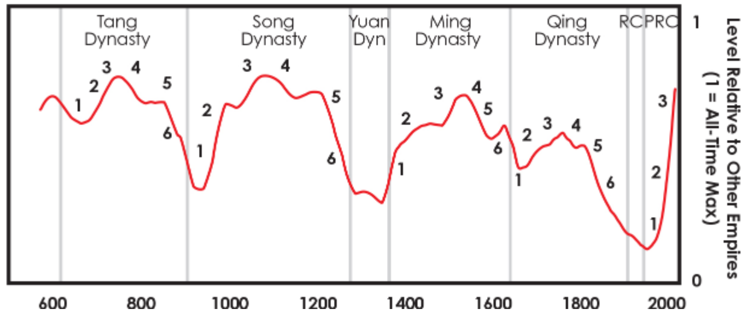


To see this at the country level, let's look at China. **The following chart shows my estimates of China's *absolute* powers and its figurative Big Cycles going back to around the year 600.** This is an ultra-simplified chart (i.e., there were many more dynasties and complexities). I am presenting it in this way so you can see how this evolution transpired from the 30,000-foot level.



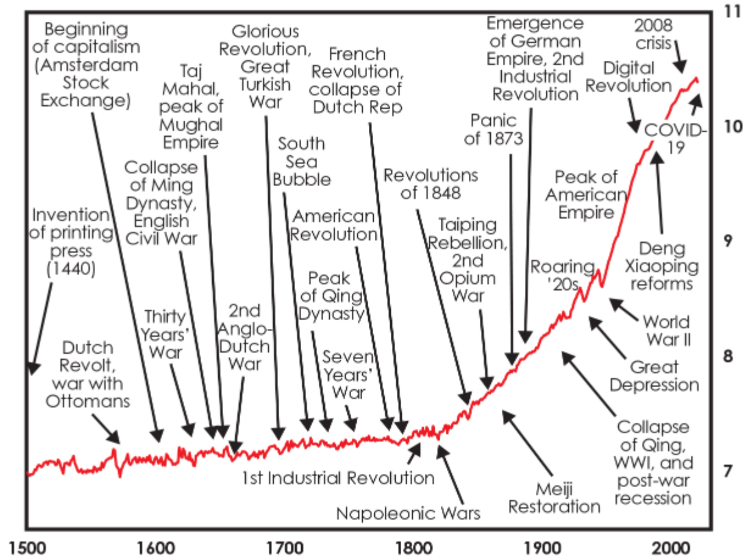
The next chart shows China's *relative* powers. The differences between the charts are due to the fact that the first one shows the absolute level of power while the second one shows the level of power relative to other empires.

MAJOR CHINESE DYNASTIES AND THEIR STAGES



Since different countries are typically in different stages of the cycle and since they take wealth and global political power from each other, some countries are rising while others are declining, so the whole is less volatile than any one country. In other words, the differences have had a diversifying effect that has made the whole world's evolution smoother than that of any individual country. That is shown in the next chart, which is an update to the global real GDP chart I showed you in Chapter 1. This chart is not a figurative representation. It is literally the best estimate we have of real GDP per capita. Embedded in this chart are the rises and falls of major empires (particularly the Dutch and the British empires and the Ming and Qing dynasties), numerous wars, and numerous booms and busts, all of which are called out. These events don't show up at the global level because they diversify each other and because they are small relative to the big trends, even though they are huge from the perspective of the people living through them.

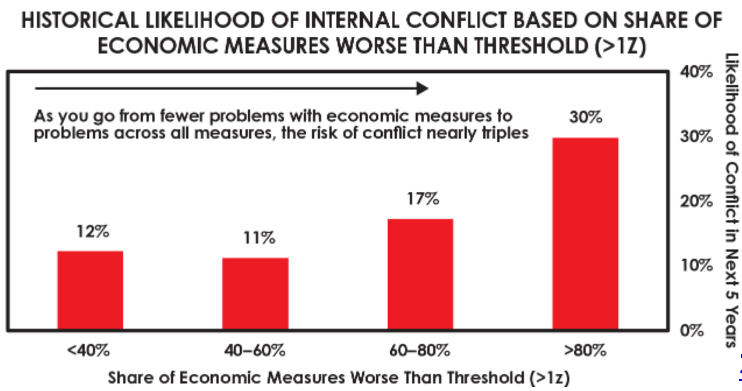
GLOBAL RGDP PER CAPITA (2017 USD, LOG)



Global RGDP is primarily a mix of European countries before 1870 due to limited reliable data coverage across other countries before that point.

To reiterate, the figurative pictures of the archetypical six-stage cycle I just painted are simplified versions of what really happens. I wanted to show you a simplified version that conveys the essence of the stages and then descend into the details. While the cycle by and large progresses as I described, it doesn't always progress exactly as I described. For example, like the stages of a disease (let's say Stage 3 cancer), being in one stage doesn't mean that the progression to the next stage is inevitable. But it does tell us a lot that is very valuable. As with a disease, certain symptoms are clearly exhibited that allow one to identify which stage in the cycle one is in, and being in that stage signifies the risks and ways of treating the situation that are essential to know and are different from those that exist in different stages. For example, being in Stage 5 means that certain conditions exist that make it more likely that the cycle will progress to Stage 6 than if it were in Stage 4 with Stage 4 conditions. By having clear and objective markers to identify which stage each country (or state or city) is in, and by having an understanding of the cause/effect relationships that produce changes, one can better know the range of possibilities and position oneself accordingly, though one can never get them exactly right.

As an example, we made an index of the number of economic red flags that have existed at different times in history, including measures of high inequality, high debt and deficits, inflation, and bad growth, to show how indicative they are of subsequent civil wars and revolutions. The following chart shows the estimated likelihood of a civil-war-type conflict based on the number of red flags. Based on what we have seen in the past, we estimate that when there are 60–80 percent of the red flags present, there is around a 1-in-6 chance of severe internal conflict. When lots of these conditions are in place (greater than 80 percent) there is around a 1-in-3 chance of a civil war or revolution—so not very probable but still too probable for comfort. The US is in the 60–80 percent bucket today.



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While I won't take you through all of the factors in each stage and their various configurations, I will outline the forces and milestones to pay most attention to in each stage, with a special emphasis on the current state of disorder in the United States and how things are progressing.

Delving into the Six Stages of the Cycle

We will now delve into what the archetypical six stages look like in greater detail so we can identify them easily when we see them and so we can better imagine what might come next.

Stage 1: When the New Order Begins and the New Leadership Consolidates Power

To fight a civil war or to have a revolution—even a peaceful one—is to have a great conflict in which one side wins and the other side loses and

the country suffers damages. Stage 1 is what follows the war; it is a time when the winners gain control and the losers must submit. While the winners were strong enough to win, at this first stage of the new order, they must also be wise enough to consolidate power and rebuild the country.

After winning power, the new leaders typically mop up the remaining opposition and fight among themselves for power. In fact, one might say that revolutions typically come in two parts—the first part is the fight to bring down the established leaders and systems, and the second part is the fight to remove those who were loyal to the former leaders and the fight for power among those who won. I will call the second part "purges" and touch on them in this section.

These consolidation of power/purge periods range widely in form and severity, depending on the degrees of conflict between the new leaders and their opposition, the amount of conflict between the new leaders themselves, and the levels of development of the various government departments and bureaucracies that they are inheriting.

This is the stage when, in some cases, the remaining opposition is killed or imprisoned so that the new leaders are assured that their enemies won't come back fighting. It is also when those revolutionaries who were on the winning side of the revolution fight against each other for power.

This stage has happened after virtually all civil wars/revolutions. Its intensity varies, usually in proportion to the intensity of the civil war/revolution that preceded this stage. At its worst, this post-revolution fighting to consolidate power produced some of the most brutal periods in a given country's history—e.g., the post-1789 French Revolution period called the Reign of Terror, the post-1917 Russian Revolution period called the Red Terror, the post-1949 Chinese Civil War period called the Anti-Rightist Campaign, etc. In some cases these purges happened a single time right after the revolution (e.g., the Reign of Terror), while in other cases they came and went episodically over decades (e.g., China's Cultural Revolution happened 17 years after the Chinese Communist Party came to power). These purges are done to consolidate power and persecute perceived ideological enemies or enemies of the state, and they are sometimes more brutal than the revolution itself. At their best, and if conditions allow because the basic system and respect for it is maintained, they're like the period after the US Civil War or during the peaceful Roosevelt revolution of the 1930s.

During this stage the leaders who do best are "consolidators of power." They typically have qualities similar to those who did best in the revolution in the prior stage—as they are strong, smart fighters who are willing and able to win at all costs. But in this stage they have to be much more politically astute because the enemies are much less apparent. Tang Emperor Taizong and Rome's Caesar Augustus excelled at this stage. More recently, leaders such as the US Founding Fathers, France's Napoleon, and Germany's Otto von Bismarck also exemplify how to effectively move from the war period to the rebuilding period.

This stage is over when the new authorities are clear and everyone is sick of the fighting and is well into the rebuilding.

Stage 2: When Resource-Allocation Systems and Government Bureaucracies Are Built and Refined

I call this phase "early prosperity" because it is typically the beginning of a peaceful and prosperous period.

After the new leaders have torn down the old order and consolidated power, or overlapping with that time, the new leaders have to start building a new system to better allocate resources. This is the stage when system and institution building are of paramount importance. What is required is designing and creating a system (order) that leads to people rowing in the same direction in pursuit of similar goals, with respect for rules and laws, and putting together an effective resource-allocation system that leads to rapidly improving productivity that benefits most people. This redesigning and rebuilding period has to be done even after lost wars because rebuilding still must occur. Examples of countries being in this stage include the United States in the 15 years after it declared independence in 1776; the early Napoleonic era immediately after Napoleon grabbed power in a coup at the end of the French Revolution in 1799; the early Japanese Meiji Restoration period immediately after the political revolution in 1868; the post-war periods in Japan, Germany, and most countries in the late 1940s through most of the 1950s; the post-civil war period in China; and Russia after the breakup of the Soviet Union.

A timeless and universal principle to keep in mind during this stage is that ***to be successful the system has to produce prosperity for most people, especially the large middle class***. As Aristotle conveyed in *Politics*: "Those states are likely to be well-administered in which the middle class is large, and stronger if possible than both the other classes… where the middle class is large, there are least likely to be factions and dissensions… For when there is no middle class, and the poor are excessive in number, troubles arise, and the state soon comes to an end."

The leaders who are best during this stage are typically very different from those who succeeded in Stages 6 and 1. I call them "civil engineers." While they need to be smart, and ideally they are still strong and inspirational, above all else they need to be able to design and build the system that is productive for most people, or they need to have people working for them who can do that. The different qualities of leaders that are required to succeed in the revolutionary Stages 6 and 1 and those that are required in this rebuilding administrative Stage 2 are exemplified by Winston Churchill and Mao being great "inspirational generals" and lousy "civil engineers." Examples of great leaders at this stage include Konrad Adenauer in Germany, Lee Kuan Yew in Singapore, and Deng Xiaoping in China, who came to power after wars and built systems that produced prosperity well beyond their lifetimes.

The most extraordinary leaders are those who took their countries through Stages 6, 1, and 2—i.e., through the civil war/revolution, through the consolidation of power, and through the building of the institutions and systems that worked fabulously for a long time after them—and did it at scale. The best ever probably were Tang Taizong (one of the revolutionary founders of the Tang Dynasty in China in the 600s, which was followed by about a century and a half of peace and prosperity that led China to become the world's largest and strongest country); Caesar Augustus (who became the first emperor of Rome in 27 BCE and began roughly 200 years of relative peace and prosperity, in which Rome became the world's largest empire); and Genghis Khan (who founded and led the Mongol Empire starting in 1206, which was followed by over a century of prosperity when it became the world's largest and strongest empire, though failure to establish a sustainable succession produced civil wars, including shortly after his death).

This sequence of rebuilding happens all the time in varying degrees depending on the amount of change that is warranted. In some cases it comes after brutal revolutions when there needs to be a rebuilding of nearly everything, and in other cases it comes when the institutions and systems that are there just need to be modified to suit the new leader.

Stage 3: When There Is Peace and Prosperity

I also call this phase "mid-prosperity." It is the sweet spot of the internal order cycle. It is when people have an abundance of opportunity to be productive, are excited about it, work well together, produce a lot, get rich, and are admired for being successful. In this stage conditions are improving for almost everyone so most of the next generation is better off than most of the prior generation, so there is broad optimism and excitement about the future. History shows us that, when done well, there is wide and almost equal access to education and merit-based placements in jobs. This draws on the widest possible range of the population to access talent and yields a system that most people believe is fair. Successful entrepreneurs, inventors, and adventurers produce new ideas and take their societies to new places and become the heroes who others aspire to be like because of how they come up with revolutionary new ideas, make people's lives better, and are rewarded for it. Debt growth fuels productivity and in turn real income growth, which makes debts easy to service and provides excess profits that make equity returns excellent. Incomes exceed expenses and savings exceed liabilities with the savings financing investment in the future. Stage 3 is an exciting period that has a lot of creativity, productivity, and energy.

Examples of this period include most of the Victorian Era in Britain (covering much of the 19th century, marked by Second Industrial Revolution inventions producing a rapid increase in prosperity); the German Empire in the late 1800s (with rapid industrialization, technological innovation, and a quickly strengthening military); and the 1960s in the United States. For example, the moon shot project exemplified the shared mission. The whole country cheered and was brought closer together when the lunar landing happened.

This is the time for the "inspirational visionary" who can a) imagine and convey an exciting picture of a future that never existed before, b) actually build that future out, and then c) use the prosperity earned to broaden the inclusiveness of it and to invest in the future. They do this while d) maintaining sound finances and e) pursuing excellent international relations, so that they protect or expand their empires without any financially or socially debilitating wars. Examples include:

- In the British Empire's Victorian Age in the mid-to-late 1800s, Prime Minister William Gladstone simultaneously maintained high levels of productivity, imposed strict budget controls that led to strong finances, and supported the general population so much that he was known as "The People's William." He also ran a peaceful and prosperous foreign policy.
- In the German Empire in the late 1800s, Chancellor Otto von Bismarck united the disparate populations of 39 different states and people of different religions to build Germany as a country and an economic powerhouse. Under him Germany had an economic boom with sound finances while brilliantly navigating international relations so it benefited internally and avoided debilitating major wars.
- Prime Minister Lee Kuan Yew successfully took Singapore through these stages by running the country as prime minister from 1959 to 1990 and mentoring until his death in 2015. He created the principles and shaped the culture to be successful long after him and avoided wars without losing power.
- In the post-war US, John F. Kennedy in his 34 short months as president from January 20, 1961, to November 22, 1963, inspired the country to go to the moon, advanced the civil rights movement, undertook the War on Poverty with Vice President Lyndon Johnson, and kept the United States out of major wars while simultaneously strongly containing opposition to the US Empire.

- In China, Deng Xiaoping transitioned a weak and inefficient communist system to a highly productive state capitalist system, quickly changing the nation's psychology to make these changes with sayings such as "it is glorious to be rich" and "it doesn't matter whether the cat is black or white as long as it catches mice"; built China's economy and finances to be very strong; enormously improved the education and quality of life of most people; dramatically increased life expectancies and reduced poverty rates; successfully led China through internal political conflicts; and strictly maintained China's sovereignty while avoiding major external conflicts.

The longer countries stay in this stage, the longer their good times last.

During this stage the developments to pay attention to that reflect the big risks that naturally develop and undermine the self-sustaining good results are the widenings of the opportunity, income, wealth, and values gaps accompanied by bad and unfair conditions for the majority, luxurious and unfairly privileged positions for the elites, declining productivity, and bad finances in which excess debts are created. The great empires and great dynasties that were able to sustain themselves stayed in Stage 3 by avoiding these risks. The failure to avoid these risks leads to Stage 4, which is a period of excesses. This is the stage in which the temptation to do everything (and borrow money to do it) can lead to the brink of conflict.

Stage 4: A Period of Excesses

I also call this the "bubble prosperity phase." I will describe it briefly because we touched on these elements before. Classically:

- There is the rapidly increasing debt-financed purchases of goods, services, and investment assets, so debt growth outpaces the capacity of future cash flows to service the debts. So bubbles are created. These debt-financed purchases emerge because investors, business leaders, financial intermediaries, individuals, and policy makers tend to assume that the future will be like the past so they bet heavily on the trends continuing.

They mistakenly believe that investments that have gone up a lot are good rather than expensive so they borrow money to buy them, which drives up their prices, which reinforces this bubble process. That is because as their assets go up in value their net worth and spending-to-income level rise, which increases their borrowing capacity, which supports the leveraging-up process, and so the spiral goes until the bubbles burst. Japan in 1988–90, the US in 1929, the US in 2006–07, and Brazil and most other Latin American commodity producers in 1977–79 are classic examples.

- There is a shift in the spending of money and time to more on consumption and luxury goods and less on profitable investments. The reduced level of investments in infrastructure, capital goods, and R&D slows the country's productivity gains and leads its cities and infrastructure to become older and less efficient.
- There is a lot of spending on the military at this stage to expand and protect global interests, especially if the country is a leading global power.
- The country's balance of payments positions deteriorate, reflecting its increased borrowing and reduced competitiveness. If the country is a reserve currency country, this borrowing is made easy as the result of non-reserve currency country savers having a preference to save in/lend to the reserve currency.
- Wealth and opportunity gaps are large and resentments between classes emerge.

During this phase, the archetypical best leader is the "well-grounded, disciplined leader" who understands and conveys sound fundamental behaviors that yield productivity and sound finances and creates restraints when the crowd wants to overdo things. These leaders are the ones who lead the country to continue to reinvest a significant amount of their earnings and their time into being productive when they become richer. As mentioned, Lee Kuan Yew, the former prime minister of Singapore, ensured that his country and fellow citizens had the culture to become well-educated, disciplined, and of strong character even after becoming successful and rich. However, these leaders are few and far between because fighting the ebullience of the masses is very unpopular. In almost all cases, after becoming rich, the country (and its leaders) become decadent, overspend, borrow to finance excess consumption, and lose competitiveness. This period of decline is exemplified by decadent leaders such as the notorious Emperor Nero (who used a citywide fire in Rome to confiscate land to build an expansive palace), Louis XIV (who expanded the Palace of Versailles while productivity fell and people endured hardships at the height of his power), and the Ming Dynasty's Wanli Emperor (who withdrew from actively governing and focused on the construction of his own immense tomb).

Stage 5: When There Are Bad Financial Conditions and Intense Conflict

The most important influence that transpires in a Big Cycle is that of debt, money, and economic activity. Because I covered that cycle comprehensively in Chapters 3 and 4, I won't explain it here in detail. But to understand Stage 5, you need to know that it follows Stage 3, in which there is peace and prosperity and favorable debt and credit conditions, and Stage 4, in which excess and decadence begin to bring about worse conditions. This process culminates in the most difficult and painful stage—Stage 6—when the entity runs out of money and there is typically terrible conflict in the form of revolution or civil war. Stage 5 is the period during which the interclass tensions that go along with worsening financial conditions come to a head. How different leaders, policy makers, and groups of people deal with conflict has a major impact on whether the country will undergo the needed changes peacefully or violently.

You can see signs of this happening now in a number of countries. Those that have adequate financial conditions (i.e., have incomes that are greater than their expenses and assets that are greater than their liabilities) are in relatively good shape. Those that do not are in relatively bad shape. They want money from the others. The problem is that there are many more who are in bad shape relative to those that are in good shape.

You can also see that these different conditions are big drivers of the differences in what is now happening to most aspects of these countries, states, cities, companies, and people—e.g., their education, healthcare, infrastructure, and well-being. You can also see big cultural differences in how countries approach their stressful conditions, with some approaching them more harmoniously than others who are more inclined to fight.

Because Stage 5 is such a pivotal stage in the internal cycle and because it's the stage that many countries, most importantly the US, are now in, I will devote some time to going through the cause/effect relationships at play during it and the key indicators to watch in examining its progression. Then I will turn more specifically to where the United States stands.

The Classic Toxic Mix

- ***The classic toxic mix of forces that brings about big internal conflicts consists of 1) the country and the people in the country (or state or city) being in bad financial shape (e.g., having big debt and non-debt obligations), 2) large income, wealth, and values gaps within that entity, and 3) a severe negative economic shock.***

That confluence typically brings about disorder, conflict, and sometimes civil wars. The economic shock can come about for many reasons, including financial bubbles that burst, acts of nature (such as pandemics, droughts, and floods), and wars. It creates a financial stress test. The financial conditions (as measured by incomes relative to expenses and assets relative to liabilities) that exist at the time of the stress test are the shock absorbers. The sizes of the gaps in incomes, wealth, and values are the degrees of fragility of the system. When the financial problems occur, they typically first hit the private sector and then the public sector. Because governments will never let the private sector's financial problems sink the entire system, it is the government's financial condition that matters most. When the government runs out of buying power, there is a collapse. But on the way to a collapse there is a lot of fighting for money and political power.

From studying 50-plus civil wars and revolutions, it became clear that the single most reliable leading indicator of civil war or revolution is bankrupt government finances combined with big wealth gaps. That is because when the government lacks financial power, it can't financially save those entities in the private sector that the government needs to save to keep the system running (as most governments, led by the United States, did at the end of 2008), it can't buy what it needs, and it can't pay people to do what it needs them to do. It is out of power.

A classic marker of being in Stage 5 and a leading indicator of the loss of borrowing and spending power, which is one of the triggers for going into Stage 6, is that the government has large deficits that are creating more debt to be sold than buyers other than the government's own central bank are willing to buy. That leading indicator is turned on when governments that can't print money have to raise taxes and cut spending, or when those that can print money print a lot of it and buy a lot of government debt. To be more specific, when the government runs out of money (by running a big deficit, having large debts, and not having access to adequate credit), it has limited options. It can either raise taxes and cut spending a lot or print a lot of money, which depreciates its value. Those governments that have the option to print money always do so because that is the much less painful path, but it leads investors to run out of the money and debt that is being printed. Those governments that can't print money have to raise taxes and cut spending, which drives those with money to run out of the country (or state or city) because paying more taxes and losing services is intolerable. If these entities that can't print money have large wealth gaps among their constituents, these moves typically lead to some form of civil war/revolution.[3]

At the time of this writing, this late-cycle debt dynamic is now playing out in the United States at both the state and federal levels, with the main difference between them being that state governments can't print money to pay their debts while the federal government can. The federal government and many state and city governments have large deficits, large debts, and large wealth gaps, and the central bank (the Federal Reserve) has the power to print money. So, at the time of this writing, the central bank is printing a lot of money and buying a lot of federal government debt, which finances the government spending that is much bigger than the federal government's intake. That has helped the federal government and those it is trying to help, though it has also cost those who are holding dollars and dollar debt a lot in real purchasing power.

- ***Those places (cities, states, and countries) that have the largest wealth gaps, the largest debts, and the worst declines in incomes are most likely to have the greatest***

conflicts. Interestingly, those states and cities in the US that have the highest per capita income and wealth levels tend to be the states and cities that are the most indebted and have the largest wealth gaps—e.g., cities like San Francisco, Chicago, and New York City and states like Connecticut, Illinois, Massachusetts, New York, and New Jersey.

Facing these conditions, expenditures have to be cut or more money has to be raised in some way. The next question becomes who will pay to fix them, the "haves" or the "have-nots"? Obviously, it can't be the have-nots. Expenditure cuts are most intolerable for those who are poorest, so there needs to be more taxation of people who can afford to pay more and there is a heightened risk of some form of civil war or revolution. **But when the haves realize that they will be taxed to pay for debt service and to reduce the deficits, they typically leave, causing the hollowing-out process.** This is currently motivating movements from some states to others in the US. If bad economic conditions occur, that hastens the process. These circumstances largely drive the tax cycle.

• ***History shows that raising taxes and cutting spending when there are large wealth gaps and bad economic conditions, more than anything else, has been a leading indicator of civil wars or revolutions of some type.*** To be clear they don't have to be violent, though they can be.

I see these cycles transpiring in my personal interactions. For example, I live in the state of Connecticut, which has the highest per capita income in the country, the largest wealth gap and income gap in the country, and one of the largest per capita debt and unfunded pension obligations in the country. I see how the haves and the have-nots are focused on their own lives and spend little time worrying about the other because they don't have much contact. I have windows into what the lives of both the haves and the have-nots are like because I have contact with the people in our community of haves and because the work my wife does to help disengaged and disconnected high school students in disadvantaged communities brings her into contact with people who live in the communities of the have-nots. I see how terrible the conditions are in those have-not communities and how the haves (who appear rich and decadent to the have-nots) don't feel rich. I see how they are all focused on their own struggles—with the haves struggling with work/life balance, making sure their kids are well-educated, etc., and the have-nots struggling with finding income, food security, avoiding violence, trying to get their kids a quality education, etc.[4]

I see how both groups are more likely to have critical, stereotypical impressions of each other that make them more inclined to dislike each other than to view themselves empathetically as members of one community in which they should help each other. I see how difficult it can be to help each other because of these stereotypes and because the haves don't feel that they have more than enough or that the have-nots deserve their financial support, and I fear what the future might hold because of the existing circumstances and how they are likely to worsen. I have seen close up how COVID-inflicted health and budget shocks have brought to the surface the terrible conditions of the have-nots and are worsening the financial gaps that could bring about the classic toxic mix dynamic.

● ***Averages don't matter as much as the number of people who are suffering and their power.*** Those who favor policies that are good for the whole—e.g., free trade, globalization, advances in technology that replace people—without thinking about what happens if the whole is not divided in a way that benefits most people are missing the fact that the whole is at risk. ● ***To have peace and prosperity, a society must have productivity that benefits most people.*** Do you think we have this today?

What does history show as the path that bankrupt governments can follow to raise productivity that benefits most people? It shows that restructuring and/or devaluing enough of the previously created debt and non-debt obligations helps a lot. That is classic in Stages 5 and 6. Once the restructuring or devaluation reduces the debt burdens, which is typically painful at the time, the reduced debt burdens allow for a rebuilding.

● ***An essential ingredient for success is that the debt and money that are created are used to produce productivity gains and favorable returns on investment, rather than just being given away without yielding productivity and income gains. If it is given away without yielding these gains, the money will be devalued to the point that it won't leave the government or anyone else with much buying power.***

● ***History shows that lending and spending on items that produce broad-based productivity gains and returns on investment that exceed the borrowing costs result in living***

standards rising with debts being paid off, so these are good policies. If the amount of money being lent to finance the debt is inadequate, it is perfectly fine for the central bank to print the money and be the lender of last resort as long as the money is invested to have a return that is large enough to service the debt. History shows and logic dictates that investing well in education at all levels (including job training), infrastructure, and research that yields productive discoveries works very well. For example, big education and infrastructure programs have paid off nearly all the time (e.g., in the Tang Dynasty and many other Chinese dynasties, in the Roman Empire, in the Umayyad Caliphate, in the Mughal Empire in India, in Japan's Meiji Restoration, and in China's educational development programs over the last couple of decades), though they have long lead times. In fact, improvements in education and infrastructure, even those financed by debt, were essential ingredients behind the rises of virtually all empires, and declines in the quality of these investments were almost always ingredients behind empires' declines. If done well, these interventions can more than counterbalance the classic toxic mix.

The classic toxic mix is usually accompanied by other problems. The more of the following conditions that are in place, the higher the probability of having a severe conflict like a civil war or revolution.

+ Decadence

While early in the cycle there is typically more spending of time and money on productive things, later in the cycle time and money go more toward indulgent things (e.g., the finer things, like expensive residences, art, jewelry, and clothes). This begins in Stage 4 when such spending is fashionable, but by Stage 5 it begins to appear grotesque. Often that decadent spending is debt-financed, which worsens the financial conditions. The change in psychology that typically goes along with these changes is understandable. The haves feel that they have earned their money so they can spend it on luxuries if they like, while the have-nots view such spending at the same time they are suffering as unfair and selfish. Besides increasing resentments, decadent spending (as distinct from saving and investing) reduces productivity. ● ***What a society spends money on matters. When it spends on***

investment items that yield productivity and income gains, it makes for a better future than when it spends on consumption items that don't raise productivity and income.

+ Bureaucracy

● ***While early in the internal order cycle bureaucracy is low, it is high late in the cycle, which makes sensible and needed decision making more difficult.*** That is because things tend to get more complex as they develop until they reach the point where even obviously good things can't be done—necessitating revolutionary changes. In a legal and contract-based system (which has many benefits), this can become a problem because the law can stand in the way of doing obviously good things. I will give you an example that I'm close to because my wife and I care about it.

Because the US Constitution doesn't make education a federal government responsibility, it has predominantly been a state and local responsibility with school funding coming from revenue raised by local taxes in cities and towns. Though it varies from state to state, typically those children in richer towns in richer states receive a much better education than those in poorer towns in poorer states. This is obviously unfair and unproductive even though most people agree that children should have equal opportunities in education. But because this structure is so ingrained in our political system, it is nearly impossible to fix without a revolutionary reinvention of how we approach it. There are more examples of the bureaucracy standing in the way of doing sensible, productive things than I have time and space to convey here. It is now a big problem in America.

+ Populism and Extremism

Out of disorder and discontent come leaders who have strong personalities, are anti-elitist, and claim to fight for the common man. They are called populists. Populism is a political and social phenomenon that appeals to ordinary people who feel that their concerns are not being addressed by the elites. It typically develops when there are wealth and opportunity gaps, perceived cultural threats from those with different values both inside and outside the country, and "establishment elites" in positions of power who are not working effectively for most people.

Populists come into power when these conditions create anger among ordinary people who want those with political power to be fighters for them. Populists can be of the right or of the left, are much more extreme than moderates, and tend to appeal to the emotions of ordinary people. They are typically confrontational rather than collaborative and exclusive rather than inclusive. This leads to a lot of fighting between populists of the left and populists of the right over irreconcilable differences. The extremity of the revolution that occurs under them varies. For example, in the 1930s, populism of the left took the form of communism and that of the right took the form of fascism while nonviolent revolutionary changes took place in the US and the UK. More recently, in the United States, the election of Donald Trump in 2016 was a move to populism of the right while the popularity of Bernie Sanders, Elizabeth Warren, and Alexandria Ocasio-Cortez reflects the popularity of populism of the left. There are increased political movements toward populism in a number of countries. It could be said that the election of Joe Biden reflects a desire for less extremism and more moderation, though time will tell.

Watch populism and polarization as markers. The more that populism and polarization exist, the further along a nation is in Stage 5, and the closer it is to civil war and revolution. In Stage 5, moderates become the minority. In Stage 6, they cease to exist.

+ Class Warfare

In Stage 5, class warfare intensifies. That is because, as a rule, • ***during times of increased hardship and conflict there is an increased inclination to look at people in stereotypical ways as members of one or more classes and to look at these classes as either being enemies or allies.*** In Stage 5, this begins to become much more apparent. In Stage 6, it becomes dangerous.

A classic marker in Stage 5 that increases in Stage 6 is the demonization of those in other classes, which typically produces one or more scapegoat classes who are commonly believed to be the source of the problems. This leads to a drive to exclude, imprison, or destroy them, which happens in Stage 6. Ethnic, racial, and socioeconomic groups are often demonized. The most classic, horrific example of this comes from the Nazi's treatment of Jews, who were blamed and persecuted for virtually all of Germany's problems. Chinese minorities living in non-Chinese countries have been demonized and scapegoated during periods of economic and social stress. In the UK, Catholics were demonized and scapegoated in numerous stressful periods, such as the Glorious Revolution and the English Civil War. Rich capitalists are commonly demonized, especially those who are viewed to be making their money at the expense of the poor. Demonizing and scapegoating are a classic symptom and problem that we must keep an eye on.

+ The Loss of Truth in the Public Domain

Not knowing what is true because of distortions in the media and propaganda increases as people become more polarized, emotional, and politically motivated.

In Stage 5, those who are fighting typically work with those in the media to manipulate people's emotions to gain support and to destroy the opposition. In other words, media folks of the left join with others of the left and media folks of the right join with others of the right in the dirty fight. The media goes wild like vigilantes: people are commonly attacked and essentially tried and found guilty in the media, and they have their lives ruined without a judge and jury. A common move among 1930s populists of the left (communists) and of the right (fascists) was to take control of the media and establish "ministers of propaganda" to guide them. The media they produced was explicitly aimed at turning the population against the groups that the governments considered "enemies of the state." The government of the democratically run United Kingdom created a "Ministry of Information" during World War I and World War II to spread government propaganda, and leading newspaper publishers were elevated by the government if they did what the government wanted them to do to win the propaganda war[5] or were vilified and suffered if they didn't cooperate. Revolutionaries did the same distorting of the truth in all sorts of publications. During the French Revolution, newspapers run by revolutionaries pushed anti-monarchist and anti-religious sentiment, but when those revolutionaries attained power, they shut down dissenting newspapers during the Reign of Terror. During times of great wealth gaps and populist thinking, stories that bring down elites are popular and lucrative, especially those that bring down left-leaning elites in right-leaning media outlets and those that bring down right-leaning elites in left-leaning media outlets. History shows that significant increases in these activities are a problem that is typical of Stage 5, and that when combined with the ability to inflict other punishments, the media becomes a powerful weapon.

It is well-recognized this is happening at the time of this writing. The perceived truth in media, both traditional and social, is lower than at any other time in our lifetimes. For example, a 2019 Gallup poll found that only 13 percent of Americans surveyed have "a great deal" of trust in the media and only 41 percent of those surveyed have either a "fair" or "great deal" of trust in the media. That compares with 72 percent who trusted the media in 1976. This is not just a fringe media problem; it is a mainstream media problem and a problem for our whole society. The dramatically decreased trustworthiness has even plagued former icons of journalistic trust such as *The Wall Street Journal* and *The New York Times*, which have seen their trust ratings plunge. In addition to being politically motivated, sensationalistic stories have become commercially rewarding at a time when the media business is in financial trouble. Most of the media folks I speak with share my concerns, though they typically won't share them openly. Still, in reflecting on the problem, Martin Baron, then executive editor of *The Washington Post*, said, "If you have a society where people can't agree on the basic facts, how do you have a functioning democracy?" This dynamic is impeding free speech because people are afraid to speak up because of how they will be attacked in both traditional and social media by distortions that are meant to bring them down.

Even very capable and powerful people are now too afraid of the media to speak up about important matters or run for public office. Since most high-profile people are torn down, most everyone I speak with agrees that it is dangerous to be a high-profile, vocal person who fights for truth and justice, especially if one offends people who are inclined to use the media to fight. Though not discussed in public because of fears of media reprisals, this issue is continuously discussed in private. For example, during a lunch I had not long ago with a general who had held a very high political position and had just left government service, we explored what he would do next. I asked him what he was most passionate about. He said, "Of course helping my country." I asked him whether he would consider running for elected office, and he explained that while he was willing to die for his country he couldn't bring himself to run for public office because of how enemies would use the media and social media to make up lies to harm him and his family. This general and almost everyone I know who we should listen to are afraid to speak openly because they fear that attacks by extremists who oppose them will be enabled and amplified by the sensationalistic media. Many of my friends tell me that I'm crazy to speak so openly about controversial things such as those covered in this book because it is inevitable that some people or groups will try to take me down via the media. I think they are probably right, but I won't let the risks dissuade me.[6]

+ Rule-Following Fades and Raw Fighting Begins

● ***When the causes that people are passionately behind are more important to them than the system for making decisions, the system is in jeopardy. Rules and laws work only when they are crystal clear and most people value working within them enough that they are willing to compromise in order to make them work well.*** If both of these are less than excellent, the legal system is in jeopardy. If the competing parties are unwilling to try to be reasonable with each other and to make decisions civilly in pursuit of the well-being of the whole, which will require them to give up things that they want and might win in a fight, there will be a sort of civil war that will test the relative powers of the relevant parties. In this stage, winning at all costs is the game and playing dirty is the norm. Late in Stage 5 is when reason is abandoned in favor of passion. ● ***When winning becomes the only thing that matters, unethical fighting becomes progressively more forceful in self-reinforcing ways. When everyone has causes that they are fighting for and no one can agree on anything, the system is on the brink of civil war/revolution.***

This typically happens in a couple of ways:

- **Late in Stage 5 it is common for the legal and police systems to be used as political weapons by those who can control them. Also private police systems form—e.g., thugs who beat people up and take their assets, and bodyguards to protect people from these**

things happening to them. For instance, the Nazi party formed a paramilitary wing before it came to power that then became an official force when the Nazis were in power. The short-lived British Union of Fascists in the 1930s and the Ku Klux Klan in the US were effectively paramilitary groups as well. Such cases are quite normal, so view their development as a marker of moving to the next stage.

- **Late in Stage 5 there are increasing numbers of protests that become increasingly violent.** Because there is not always a clear line between a healthy protest and the beginnings of a revolution, leaders in power often struggle over how to allow protests without giving the perceived freedom to revolt against the system. Leaders must manage these situations well. A classic dilemma arises when demonstrations start to cross over into revolution. Both giving the freedom to protest and suppressing protests are risky paths for leaders, as either path could lead the revolution to get strong enough to topple the system. No system allows people to bring down the system—in most, an attempt to do so is treason, typically punishable by death. Nonetheless, it is the job of revolutionaries to bring down systems, so governments and revolutionaries test each other to see what the limits are. When broad-based discontent bubbles up and those in power allow it to grow, it can boil over to the point that when they try to put a lid on it, it explodes. The conflicts in the late part of Stage 5 typically build up to a crescendo that triggers the violent fighting that signifies the transition into what historians stamp as official civil war periods, which I am identifying as Stage 6 in the Big Cycle. ● ***People dying in the fighting is the marker that almost certainly signifies the progression to the next and more violent civil war stage, which will continue until the winners and losers are clearly determined.***

That brings me to my next principle: ● ***when in doubt, get out—if you don't want to be in a civil war or a war, you should get out while the getting is good.*** This is typically late in Stage 5. History has shown that when things get bad, the doors typically close for people who want to leave. The same is true for investments and money as countries introduce capital controls and other measures during such times.

● ***Crossing the line from Stage 5 (when there are very bad financial conditions and intense internal and external conflict exist) to Stage 6 (when there is civil war) occurs when the system for resolving disagreements goes from working to not working.*** In other words, it happens when the system is broken beyond repair, people are violent with each other, and the leadership has lost control.

As you might imagine, it is a much bigger deal to break a system/order and build a new one than it is to make revolutionary changes within an existing system/order. Though breaking a system/order is more traumatic, it isn't necessarily a worse path than operating within a system.

Deciding whether to keep and renovate something old that is not working well or to dispose of it and replace it with something new is never easy, especially when the something new is not clearly known and what is being replaced is as important as the domestic order. Nonetheless, it happens, though typically it is not decided on intellectually; it is more often emotionally driven.

● ***When one is in Stage 5 (like the US is now), the biggest question is how much the system will bend before it breaks.*** The democratic system, which allows the population to do pretty much whatever it decides to do, produces more bending because the people can make leadership changes and only have themselves to blame. In this system regime changes can more easily happen in a peaceful way. However, the "one person, one vote" democratic process has the drawback of having leaders selected via popularity contests by people who are largely not doing the sort of thoughtful review of capabilities that most organizations would do when trying to find the right person for an important job. Democracy has also been shown to break down in times of great conflict.

Democracy requires consensus decision making and compromise, which requires a lot of people who have opposing views to work well with each other within the system. That ensures that parties that have significant constituencies can be represented, but like all big committees of people who have widely different views (and might even dislike each other), the decision-making system does not lend itself to efficient decision making. ● ***The biggest risk to democracies is that they produce such fragmented and antagonistic decision making that they can be ineffective, which leads to bad results, which leads to revolutions led by populist autocrats***

who represent large segments of the population who want to have a strong, capable leader get control of the chaos and make the country work well for them.

Also noteworthy: history has shown that during times of great conflict federalist democracies (like the US) typically have conflicts between the states and the central government over their relative powers. That would be a marker to look out for that hasn't yet arisen much in the US; its happening would signify the continued progression toward Stage 6.

There are far too many breakdowns of democracies to explore, let alone describe. While I looked into a number of them to see the patterns, I haven't fully mined them, and I'm not going to dive into them here. I will say that the factors described in the explanations of Stage 5 when taken to the extreme—most importantly, terrible finances, decadence, internal strife and disorder, and/or major external conflict—lead to a dysfunctional set of conditions and a fight for power led by a strong leader. Archetypical examples include Athens from the late 400s to the 300s BCE, the end of the Roman Republic in the century or so preceding 27 BCE,[7] Germany's Weimar Republic in the 1920s, and the weak democracies of Italy, Japan, and Spain in the 1920s and 1930s that turned to autocracies of the right (fascism) to bring order to the chaos.

- ***Different stages require different types of leaders to get the best results.*** **Stage 5 is a juncture in which one path could lead to civil war/revolution and the other could lead to peaceful and, ideally, prosperous coexistence.** Obviously the peaceful and prosperous path is the ideal path, but it is the much more difficult path to pull off. That path requires a "strong peacemaker" who goes out of their way to bring the country together, including reaching out to the other side to involve them in the decision making and reshaping the order in a way that most people agree is fair and works well (i.e., is highly productive in a way that benefits most people). **There are few such cases in history. We pray for them.** The second type is a "strong fighter" who is capable of taking the country through the hell of civil war/revolution.

Stage 6: When There Are Civil Wars

Civil wars inevitably happen, so rather than assuming "it won't happen here," which most people in most countries assume after an extended period of not having them, it is better to be wary of them and look for the markers to indicate how close one is. While in the last section we looked at nonviolent revolutions that took place within the order, in this section we will be looking at the markers and the patterns of civil wars and revolutions that were almost always violent and toppled the old order and replaced it with a new one. **Though there are innumerable examples that I could have examined to understand how they work, I chose what I believe are the 29 most significant ones, which are shown in the following table. I categorized this group into those that produced big changes to the system/regime and those that did not.** For example, the US Civil War was a really bloody civil war that failed to overturn the system/order, so it is in the second group at the bottom of the table, while those that toppled the system/order are at the top. These categories are of course imprecise, but once again we won't let imprecision stand in the way of seeing what we couldn't see if we insisted on being precise. Most of these conflicts, though not all of them, transpired in the archetypical way described in this section.

CONFLICT	COUNTRY	BEGAN IN...
Dutch Revolt	NLD	1566
English Civil War	GBR	1642
Glorious Revolution	GBR	1688
American Revolution	USA	1775
French Revolution	FRA	1789
Trienio Liberal	ESP	1820
French Revolution of 1848	FRA	1848
Meiji Restoration	JPN	1868
Xinhai Revolution	CHN	1911
Russian Revolution and Civil War	RUS	1917
German Revolution/End of Monarchy	DEU	1918
Rise of Hitler/Political Violence	DEU	1929
Rise of Japanese Militarists	JPN	1932

Cases that created changes to the system or regime

Spanish Civil War	ESP	1936
Chinese Civil War	CHN	1945
Jacobite Risings	GBR	1745
Pugachev's Rebellion	RUS	1773
Dutch Patriot Revolt	NLD	1781
White Lotus Rebellion	CHN	1794
German Revolutions of 1848	DEU	1848
Taiping Rebellion	CHN	1851
Panthay Rebellion	CHN	1856
US Civil War	USA	1861
Muslim Rebellion	CHN	1862
Paris Commune	FRA	1871
Boxer Rebellion	CHN	1899
1905 Russian Revolution	RUS	1905

Cases that didn't create changes to the system or regime

National Protection War	CHN	1915
6 February 1934 Crisis	FRA	1934

A classic example of a civil war breaking the system and having to build a new system is the Russian Revolution/Civil War of 1917. This put into place the communist internal order that eventually entered Stage 5 in the late 1980s, which led it to attempt to make revolutionary changes within the system—called *perestroika* (i.e., restructuring)—which failed and were followed by the collapse of the Soviet Union's order in 1991. The communist domestic order lasted 74 years (from 1917 until 1991). That order was replaced by the new system/order that is now governing Russia, which, after the collapse of the old order, was built in the classic ways described earlier in this chapter in my explanations of Stages 1 and 2.

Another is Japan's Meiji Restoration, which came about as a result of a three-year revolution (1866–69) that happened because the Japanese were closed off to the outside world and failed to advance. The Americans forced the Japanese to open, which prompted a revolutionary group to fight and defeat the rulers (led by the military shogun) in battle, which led to overturning the internal order then run by the four classes—the military, farmers, artisans, and merchants—that had ruled Japan. This old Japanese order run by traditional people was ultra-conservative (e.g., social mobility was outlawed) and was replaced by revolutionaries who were relatively progressive and changed everything by reinstating the powers of a modernizing emperor. Early in this period there were lots of labor disputes, strikes, and riots that resulted from the classic triggers of wealth gaps and bad economic conditions. In the reform process the leadership provided universal elementary education for both boys and girls, adopted capitalism, and opened the country up to the outside world. They did this with new technologies, which led them to become very competitive and gain wealth.

There are many such cases of countries that did the right things to produce revolutionarily beneficial improvements, just as there are many cases of revolutionaries doing the wrong things that inflicted terrible pain on their people for decades. By the way, as a result of its reformations Japan went on to move through the classic stages of the Big Cycle. It became extremely successful and rich. But over time it became decadent, overextended, and fragmented, had an economic depression, and fought expensive wars, all of which led to a classic demise. Its Meiji order and its classic Big Cycle lasted for 76 years from 1869 to 1945.

● ***Civil wars and revolutions inevitably take place to radically change the internal order. They include total restructurings of wealth and political power that include complete restructurings of debt and financial ownership and political decision making.*** These changes are the natural consequence of needing to make big changes that can't be made within the existing system. Almost all systems encounter them. That is because almost all systems benefit some classes of people at the expense of other classes, which eventually becomes intolerable to the point that there is a fight to determine the path forward. When the gaps in wealth and values become very wide and bad economic conditions ensue so that the system is not working for a large percentage of the people, the people will fight to change the system. Those who are suffering the most economically will fight to get more wealth and power from those who have wealth and power and who benefit from the existing system. Naturally the revolutionaries want to radically change the system, so naturally they are willing to break the laws that those in power demand they adhere to. These revolutionary changes typically happen violently through civil wars, though as previously described, they can come about peacefully without toppling the system.

The periods of civil war are typically very brutal. Typically, early on these wars are forceful and orderly struggles for power, and as the fighting and emotions intensify and the sides do anything to win, the levels of brutality accelerate unexpectedly such that the actual levels of brutality that occur in the Stage 6 civil wars and revolutions would have been considered implausible in Stage 5. The elites and moderates generally flee, are imprisoned, or are killed. Reading the stories of civil wars and revolutions, such as the Spanish Civil War, the Chinese Civil War, the Russian Revolution, and the French Revolution, made my hair curl.

How do they transpire? Earlier I described the dynamics of Stage 5 that led to crossing the line into Stage 6. During this stage all of those intensify greatly. I will explain.

How Civil Wars and Revolutions Transpire

As previously described, the cycle of building wealth and wealth gaps that leads to a very small percentage of the population controlling an exceptionally large percentage of the wealth eventually results in the poor majority overthrowing the rich minority via civil wars and revolutions. This has happened more times than one can imagine.

While most of the archetypical civil wars and revolutions shifted power from the right to the left, many shifted wealth and power to the right and away from those on the left. However, there were fewer of them and they were different. They typically happened when the existing orders slipped into dysfunctional anarchies and a large percentage of the population yearned for strong leadership, discipline, and productivity. Examples of revolutions from the left to the right include Germany, Spain, Japan, and Italy in the 1930s; the fall of the Soviet Union in the 1980s to the early 1990s; the 1976 coup in Argentina replacing Isabel Perón with a military junta; and the coup leading to the Second French Empire in 1851. All those that I examined worked or didn't work for the same reason. Like those of the left, these new internal orders succeeded when they produced broad-based economic successes and failed when they did not. Because broad economic prosperity is the biggest reason a new regime succeeds or fails, the long-term trends have been to both greater total wealth and broader distribution of the wealth (i.e., better economic and health outcomes for the average person). That big picture can be easily lost when one is in and experiencing one part of the Big Cycle.

Typically the people who led the civil war/revolution were (and still are) well-educated people from middle-class backgrounds. For example, three of the key revolutionary leaders of the French Revolution were Georges-Jacques Danton, a lawyer raised in a bourgeois family; Jean-Paul Marat, a physician, scientist, and journalist raised in a bourgeois family; and Maximilian

Robespierre, a lawyer and statesman also from a bourgeois family. This revolution was initially supported by many liberal aristocrats, like the Marquis de Lafayette, who were raised in moderately well-off families. Similarly, the leaders of the Russian Revolution were Vladimir Lenin, who studied law, and Leon Trotsky, who was raised in a bourgeois family of intellectuals. The Chinese Civil War was led by Mao, who was from a moderately well-off family and studied a variety of subjects such as law, economics, and political theory, and Zhou Enlai, who was from a scholarly middle-class family of civil servants. **These leaders also typically were (and still are) charismatic and able to lead and work well with others to build big, well-run organizations that have the power to bring about the revolutions. If you want to look for the revolutionaries of the future, you might keep an eye on those who have these qualities. Over time they typically evolve from being idealistic intellectuals wanting to change the system to be fairer to brutal revolutionaries bent on winning at all costs.**

While having large wealth gaps during economically difficult times was typically the biggest source of conflict, there were always other reasons for conflict that added up to a lot of opposition to the leadership and the system. Typically in revolutions the revolutionaries with these different grievances joined together to make revolutionary changes; while they looked united during the revolution, after winning the revolution, they typically fought with each other over issues and for power.

As previously mentioned, **during the civil war/revolution stage of the cycle the governments in power almost always had an acute shortage of money, credit, and buying power. That shortage created the desire to grab money from those who had it, which led those who had wealth to move it into places and assets that were safe, which led the governments to stop these movements by imposing capital controls—i.e., controls on movements to other jurisdictions (e.g., other countries), to other currencies, or to assets that are more difficult to tax and/or are less productive (e.g., gold).**

To make matters even worse, when there was internal disorder, foreign enemies were more likely to challenge the country. This happens because domestic conflict causes vulnerabilities that make external wars more likely. Internal conflict splits the people within a country, is financially taxing on them, and demands attention that leaves less time for the leaders to tend to other issues—all things that create vulnerabilities for foreign powers to take advantage of. That is the main reason why internal wars and external wars tend to come close together. Other reasons include: emotions and tempers are heightened; strong populist leaders who tend to come to power at such times are fighters by nature; when there are internal conflicts leaders find that a perceived threat from an external enemy can bring the country together in support of the leader so they tend to encourage the conflict; and being deprived leads people/countries to be more willing to fight for what they need, including resources that other countries have.

- ***Almost all civil wars have had some foreign powers participating in attempt to influence the outcome to their benefit.***
- ***The beginnings of civil wars and revolutions aren't clear when they are happening, though they are obvious when one is deeply in the middle of them.*** While historians assign dates to the beginnings and ends of civil wars, they are arbitrary. The truth is that almost no one at the time knows that a civil war has begun or that it has ended, but they know when they are in them. For example, many historians have designated July 14, 1789, as the day the French Revolution began because a mob stormed an armory and prison called the Bastille. But nobody at the time thought it was the beginning of the French Revolution or had any idea how terribly brutal that civil war and revolution would become. While one might not know what's to come, one can have imprecise markers that help one place where one is, to see the direction that one is moving in, and to know something about what the next stage will be like.

Civil wars are incredibly brutal because they are fights to the death. Everyone is an extremist because everyone is forced to pick a side and fight—also moderates lose out in knife fights.

As for what types of leaders are best for civil wars and revolutions, they are the "inspirational generals"—people who are strong enough to marshal support and win the various types of battles they have to win.

Because the fight is brutal they have to be brutal enough to do whatever is necessary to win.

The time that historians stamp as the civil war period typically lasts a few years and determines the official winners and losers, which is conveyed by who gets to occupy the government buildings in the capital. But like the beginnings, the ends of civil wars/revolutions are not as clearly defined as historians convey. The fighting to consolidate power can go on for a long time after the official civil war has ended.

While civil wars and revolutions are typically extremely painful, they often lead to restructurings that, if done well, can establish the foundation for improved future results. What the future after the civil war/revolution looks like depends on how the next steps are handled.

CONCLUSION

My study of history has taught me that nothing is forever other than evolution, and within evolution there are cycles that are like tides that come in and go out and that are hard to change or fight against. To handle these changes well it is essential to know which stage of the cycle one is in and to know timeless and universal principles for dealing with it. As conditions change the best approaches change—i.e., what is best depends on the circumstances and the circumstances are always changing in the ways we just looked at. For that reason it is a mistake to rigidly believe that any economic or political system is always best because there will certainly be times when that system is not best for the circumstances at hand, and if a society doesn't adapt it will die. That is why constantly reforming systems to adapt well is best. The test of any system is simply how well it works in delivering what most of the people want, and this can be objectively measured, which we can do and will continue to do. Having said that, the lesson from history that comes through most loudly and most clearly is that skilled collaborations to produce productive win-win relationships to both grow and divide the pie well, so that most people are happy, are much more rewarding and much less painful than fighting civil wars over wealth and power that lead to one side subjugating the other side.

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[1] To get a rich picture of what makes great leaders great in different types of circumstances, I recommend Henry Kissinger's forthcoming book on leadership.

[2] This chart is based on historical analysis of nine great powers (covering about 2,200 years of history in total). The likelihood of conflict is based on major cases of civil war, rebellion, and revolution but excludes peaceful revolutions that did not change the existing system. The analysis does not count the probability of conflict arising in a period when a country is already in the midst of internal conflict (and the five years following) to avoid counting periods in which economic conditions were bad because of the conflict itself.

[3] To be clear, when a government's finances are in bad shape that does not necessarily mean it will run out of buying power. But it does mean that there is a much higher risk of that happening than if the government were in a financially strong position.

[4] Of course, these two kinds of struggles aren't equivalent. Still, in both cases, I have found that people are focused on their own issues and communities and don't understand the circumstances of those they don't have direct contact with. In many communities, people—and most heartbreakingly the children—are desperately poor and neglected. There is an acute shortage of money for basics, such as adequate school supplies, nutrition, and healthcare, and an environment of violence and trauma that perpetuates a cycle in which children are brought up intellectually and physically malnourished and traumatized; this leaves them disadvantaged as they grow into adulthood, which makes it hard for them to earn a living, which perpetuates the cycle. Consider this fact: a recent study that our foundation funded showed that 22 percent of the high school students in Connecticut—the richest state in the country by income per capita—are either "disengaged" or "disconnected." A disengaged student is one who has an absentee rate of greater than 25 percent and is failing classes. A disconnected student is one who the system can't track because they dropped out. Imagine the consequences in 10 years and the human and social costs of this cycle. Our society has not established limits to how terrible it will allow conditions to get.

[5] Viscount Northcliffe, who controlled just under half of daily newspaper circulation in the UK around World War I, was known for anti-German coverage and was made "Director of Propaganda in Enemy Countries" by the government in 1918.

[6] What can be done? The news media is unique in being the only industry that operates without quality controls or checks on its power. I and most others believe that it would be terrible for our government to regulate it and, at the same time, believe that something has to be done to fix the problem. Perhaps if people protest enough the media could be motivated to create a self-regulatory organization to create and regulate ratings the way the Motion Picture Association did. I don't have a clue about what should be done because this problem isn't in my areas of expertise, and it's not my place to offer suggestions to try to fix the problem; however, it is my responsibility to point out that we are in an era in which sensationalism, commercialism, and political desires to manipulate people's views have superseded accuracy and journalistic integrity as the primary objectives of most of those in the media and that this is like a cancer that threatens our well-being. If you believe that fake and distorted media is a problem and you are interested in watching the

media/propaganda for clues about whether and how this is transpiring, here are a few commonly recommended things to look out for. Ask yourself:

1) Does the story consist of emotionally triggering, unsubstantiated accusations, or are the facts substantiated and the sources provided? When the facts are put aside to create an exciting story and the sources are undisclosed, don't believe the story.
2) Does the writer welcome or not welcome replies or arguments that refute what they are asserting, and are they willing or not willing to publish them along with what they published?
3) Are the accusations in the story consistent with what has been identified and proven in the legal system? If people or groups are accused in the media of doing bad things but they haven't been accused and judged to have done bad things in the legal system (which follows a process that tries to weigh the evidence to get at what is true), at least ask yourself why that is and probably don't believe the story.
4) If the writer or outlet has previously shown themselves to be biased, assume that they and their stories are biased.

[7] The Roman Republic and Athens both had democratic elements, but not everyone was able to participate or vote equally. Although democracies have existed for thousands of years, it is only recently that most people were allowed to vote. For example, in the US, African-American men were not universally allowed to vote until 1870, and women of all races until 1920.

CHAPTER 6

THE BIG CYCLE OF EXTERNAL ORDER AND DISORDER

Relationships between people and the orders that govern them work in basically the same ways, whether they are internal or external, and they blend together. In fact, it wasn't long ago that there were no distinctions between internal and external orders because there were no clearly defined and mutually recognized boundaries between countries. For that reason, **the six-stage cycle of going between order and disorder that I described in the last chapter about what happens within countries works the same way between countries, with one big exception:** ● ***international relations are driven much more by raw power dynamics.*** **That is because all governance systems require effective and agreed-upon 1) laws and law-making abilities, 2) law enforcement capabilities (e.g., police), 3) ways of adjudicating (e.g., judges), and 4) clear and specified consequences that both suit crimes and are enforced (e.g., fines and incarcerations), and those things either don't exist or are not as effective in guiding relations between countries as they are in guiding relations within them.**

While attempts have been made to make the external order more rule-abiding (e.g., via the League of Nations and the United Nations), by and large they have failed because these organizations have not had more wealth and power than the most powerful countries. **When individual countries have more power than the collectives of countries, the more powerful individual countries rule. For example, if the US, China, or other countries have more power than the United Nations, then the US, China, or other countries will determine how things go rather than the United Nations. That is**

because *power prevails*, and wealth and power among equals is rarely given up without a fight.

When powerful countries have disputes, they don't get their lawyers to plead their cases to judges. Instead, they threaten each other and either reach agreements or fight. **The international order follows the law of the jungle much more than it follows international law.**

There are five major kinds of fights between countries: trade/economic wars, technology wars, capital wars, geopolitical wars, and military wars. Let's begin by briefly defining them.

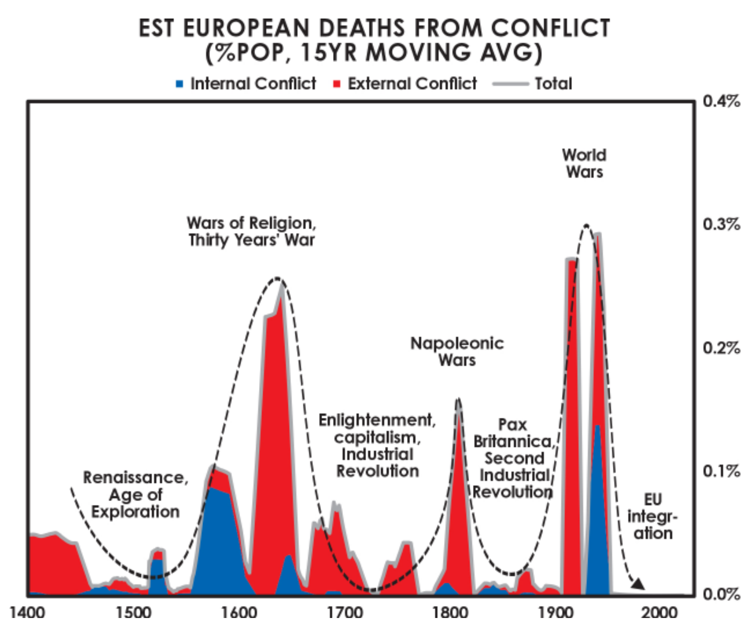
1. **Trade/economic wars:** Conflicts over tariffs, import/export restrictions, and other ways of damaging a rival economically
2. **Technology wars:** Conflicts over which technologies are shared and which are held as protected aspects of national security
3. **Geopolitical wars:** Conflicts over territory and alliances that are resolved through negotiations and explicit or implicit commitments, not fighting
4. **Capital wars:** Conflicts imposed through financial tools such as sanctions (e.g., cutting off money and credit by punishing institutions and governments that offer it) and limiting foreign access to capital markets
5. **Military wars:** Conflicts that involve actual shooting and the deployment of military forces

Most fights between nations fall under one or more of those categories (cyber warfare, for example, has a role in all of them). They are over wealth and power and the ideologies pertaining to them. **While most of these types of wars don't involve shooting and killing, they all are power struggles.** In most cases, the first four kinds of war will evolve over time as intense competitions between rival nations until a military war begins. **These struggles and wars, whether or not they involve shooting and killing, are exertions of power of one side over the other. They can be all-out or contained, depending on how important the issue is and what the relative powers of the opponents are. But once a military war begins, all four of the other dimensions will be weaponized to the greatest extent possible.**

As discussed in the last several chapters, all of the factors that drive internal and external cycles tend to improve and worsen together. When things get bad, there are more things to argue over, which leads to greater inclinations to fight. That's human nature, and it is why we have the Big Cycle, which oscillates between good times and bad ones.

- ***All-out wars typically occur when existential issues (ones that are so essential to the country's existence that people are willing to fight and die for them) are at stake and they cannot be resolved by peaceful means. The wars that result from them make it clear which side gets its way and has supremacy in subsequent matters.*** That clarity over who sets the rules then becomes the basis of a new international order.

The following chart shows the cycles of internal and external peace and conflict in Europe going back to 1500 as reflected in the deaths they caused. As you can see, **there were three big cycles of rising and declining conflict, averaging about 150 years each. Though big civil and external wars last only a short time, they are typically the culmination of the longstanding conflicts that led up to them.** While World Wars I and II were separately driven by the classic cycle, they were also interrelated.



As you can see, **each cycle consisted of a relatively long period of peace and prosperity (e.g., the Renaissance, the Enlightenment, and the**

Industrial Revolution) that sowed the seeds for terrible and violent external wars (e.g., the Thirty Years' War, the Napoleonic Wars, and the two World Wars). Both the upswings (the periods of peace and prosperity) and the downswings (the periods of depression and war) affected the whole world. Not all countries prosper when the leading powers do because countries gain at the expense of others. For example, the decline of China from around 1840 to 1949, known as the "Century of Humiliation," came about because the Western powers and Japan exploited China.

As you read on, keep in mind that ● ***the two things about war that one can be most confident in are 1) that it won't go as planned and 2) that it will be far worse than imagined***. It is for those reasons that so many of the principles that follow are about ways to avoid shooting wars. Still, whether they are fought for good reasons or bad, shooting wars happen. To be clear, while I believe most are tragic and fought for nonsensical reasons, some are worth fighting because the consequences of not fighting them (e.g., the loss of freedom) would be intolerable.

THE TIMELESS AND UNIVERSAL FORCES THAT PRODUCE CHANGES TO THE EXTERNAL ORDER

As I explained in Chapter 2, after self-interest and self-survival, the quest for wealth and power is what most motivates individuals, families, companies, states, and countries. Because wealth equals power in terms of the ability to build military strength, control trade, and influence other nations, ● ***domestic and military strength go hand in hand***. It takes money to buy guns (military power) and it takes money to buy butter (domestic social spending needs). When a country fails to provide adequate amounts of either, it becomes vulnerable to domestic and foreign opposition. From my study of Chinese dynasties and European empires, I've learned that ● ***the financial strength to outspend one's rivals is one of the most important strengths a country can have.*** That is how the United States beat the Soviet Union in the Cold War. Spend enough money in the right ways, and you don't have to have a shooting war. Long-term success depends on sustaining both the "guns" and the "butter" without producing the excesses that lead to their declines. In other words, a country must be strong enough financially to give its people both a good living standard and protection from outside enemies. The really successful countries have been able to do that for 200 to 300 years. None has been able to do it forever.

Conflict arises when the dominant power begins to weaken or an emerging power begins to approach it in strength—or both. ● ***The greatest risk of military war is when both parties have 1) military powers that are roughly comparable and 2) irreconcilable and existential differences.*** As of this writing, the most potentially explosive conflict is that between the United States and China over Taiwan.

The choice that opposing countries face—either fighting or backing down—is very hard to make. Both are costly—fighting in terms of lives and money, and backing down in terms of the loss of status, since it shows weakness, which leads to reduced support. When two competing entities each have the power to destroy the other, both must have extremely high trust that they won't be unacceptably harmed or killed by the other. Managing the prisoner's dilemma well, however, is extremely rare (see the addendum to Chapter 2 for a full explanation).

While there are no rules in international relations other than those the most powerful impose on themselves, some approaches produce better outcomes than others. Specifically, those that are more likely to lead to win-win outcomes are better than those that lead to lose-lose outcomes. Hence this all-important principle: ● ***to get more win-win outcomes one needs to negotiate with consideration given to what is most important to the other party and to oneself, and know how to trade them.***[1],[2]

Skilled collaborations to produce win-win relationships that both increase and divide up wealth and power well are much more rewarding and much less painful than wars that lead to one side subjugating the other. Seeing things through your adversary's eyes and clearly identifying and communicating your red lines to them (i.e., what cannot be compromised) are the keys to doing this well. ● ***Winning means getting the things that are most important without losing the things that are most important, so wars that cost much more in lives and money than they provide in benefits are stupid.*** But "stupid" wars still happen all the time for reasons that I will explain.

It is far too easy to slip into stupid wars because of a) the prisoner's dilemma, b) a tit-for-tat escalation process, c) the perceived costs of backing down for the declining power, and d) misunderstandings existing when decision making has to be fast. Rival great powers typically find themselves in the prisoner's dilemma; they need to have ways of assuring the other that they won't try to kill them lest the other tries to kill them first. Tit-for-tat escalations are dangerous in that they require each side to escalate or lose what the enemy captured in the last move; it is like a game of chicken—push it too far and there is a head-on crash.

Untruthful and emotional appeals that rile people up increase the dangers of stupid wars, so it is better for leaders to be truthful and thoughtful in explaining the situation and how they are dealing with it (this is especially essential in a democracy, in which the opinions of the population matter). The worst thing is when leaders are untruthful and emotional in dealing with their populations, and it is worse still when they take over the media.

By and large, the tendency to move between win-win relationships and lose-lose relationships happens in a cyclical way. People and empires are more likely to have cooperative relationships during good times and to fight during bad times. When the existing great power is declining in relation to a rising power, it has a natural tendency to want to maintain the status quo or the existing rules, while the rising power wants to change them to be in line with the changing facts on the ground.

While I don't know about the love part of the saying "all is fair in love and war," I know the war part is right. As an example, in the American Revolutionary War, when the British lined up in rows for the fight and the American revolutionaries shot at them from behind trees, the British thought that was unfair and complained. The revolutionaries won believing the British were foolish and that the cause of independence and freedom justified changing the rules of war. That's just how it is.

This leads me to one final principle: ● ***have power, respect power, and use power wisely.*** Having power is good because power will win out over agreements, rules, and laws all the time. When push comes to shove, those who have the power to either enforce their interpretation of the rules and laws or to overturn them will get what they want. It is important to respect power because it's not smart to fight a war that one is going to lose; it is preferable to negotiate the best settlement possible (that is unless one wants to be a martyr, which is usually for stupid ego reasons rather than for sensible strategic reasons). It is also important to use power wisely. Using power wisely doesn't necessarily mean forcing others to give you what you want—i.e., bullying them. It includes the recognition that generosity and trust are powerful forces for producing win-win relationships, which are fabulously more rewarding than lose-lose relationships. In other words, it is often the case that using one's "hard powers" is not the best path and that using one's "soft powers" is preferable.[3]

When thinking about how to use power wisely, it's also important to decide when to reach an agreement and when to fight. To do that, a party must imagine how its power will change over time. It is desirable to use one's power to negotiate an agreement, enforce an agreement, or fight a war when one's power is greatest. That means that it pays to fight early if one's relative power is declining and fight later if it's rising.

If one is in a lose-lose relationship, one has to get out of it one way or another, preferably through separation, though possibly through war. To handle one's power wisely, it's usually best not to show it because it will usually lead others to feel threatened and build their own threatening powers, which will lead to a mutual escalation that threatens both. Power is usually best handled like a hidden knife that can be brought out in the event of a fight. But there are times when showing one's power and threatening to use it are most effective for improving one's negotiating position and preventing a fight. Knowing what matters most and least to the other party, especially what they will and won't fight for, allows you to work your way toward an equilibrium that both parties consider a fair resolution of a dispute.

Though it is generally desirable to have power, it is also desirable to not have power that one doesn't need. That is because maintaining power consumes resources, most importantly your time and your money. Also, with power comes the burden of responsibilities. I have often been struck by how much happier less powerful people can be relative to more powerful people.

CASE STUDY: WORLD WAR II

Now that we have covered the dynamics and principles that drive the external order and disorder cycle, which were derived by looking at many cases, I'd like to briefly look at the World War II case because it provides the most recent example of the iconic dynamic of going from peace to war. Though it is only one case, it clearly shows how the confluence of the three big cycles—i.e., the overlapping and interrelated forces of the money and credit cycle, the internal order/disorder cycle, and the external order/disorder cycle—created the conditions for a catastrophic war and laid the groundwork for a new world order. While the stories from this period are very interesting in and of themselves, they are especially important because they provide lessons that help us think about what is happening now and what might be ahead. Most importantly, the United States and China are in an economic war that could conceivably evolve into a military war and comparisons between the 1930s and today provide valuable insights into what might happen and how to avoid a terrible war.

THE PATH TO WAR

To help convey the picture of the 1930s, I will run through the geopolitical highlights leading up to the official start of the war in Europe in 1939 and the bombing of Pearl Harbor in 1941. Then I will quickly move through the war and the start of the new world order in 1945, with the US at the peak of its power.

The global depression that followed the Great Crash of 1929 led to almost all countries having big internal conflicts over wealth. This caused them to turn to more populist, autocratic, nationalistic, and militaristic leaders and policies. These moves were either to the right or to the left and occurred in varying degrees, according to the countries' circumstances and the strengths of their democratic or autocratic traditions. In Germany, Japan, Italy, and Spain, extremely bad economic circumstances and less well-established democratic traditions led to extreme internal conflicts and a turn to populist/autocratic leaders of the right (i.e., fascists), just as at different points in time the Soviet Union and China, which also endured extreme circumstances and had no experience with democracy, turned to populist/autocratic leaders of the left (i.e., communists). The US and the UK had much stronger democratic traditions and less severe economic conditions, so they became more populist and autocratic than they had been, but not nearly as much as other nations.

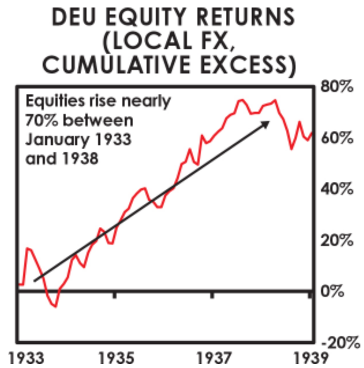
Germany and Japan

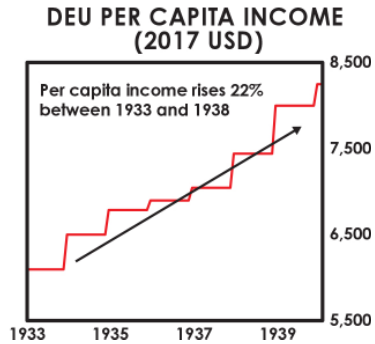
While Germany had previously been saddled with tremendous reparation debts following World War I, by 1929 it was beginning to emerge from under their yoke via the Young Plan, which provided for considerable debt relief and the departure of foreign troops from Germany by 1930.[4] But the global depression hit Germany hard, leading to nearly 25 percent unemployment, massive bankruptcies, and extensive poverty. As is typical, there was a struggle between populists of the left (communists) and populists of the right (fascists). Adolf Hitler, the leading populist/fascist, tapped into the mood of national humiliation to build a nationalistic furor, casting the Treaty of Versailles and the countries that imposed it as the enemy. He created a 25-point nationalistic program and rallied support around it. In response to internal fighting and the desire to restore order, Hitler was appointed chancellor in January 1933, drawing large support for his Nazi Party from industrialists who feared the communists. Two months later, the Nazi Party won the most support and the most seats in the German Parliament (the Reichstag).

Hitler refused to pay any further reparation debts, left the League of Nations, and took autocratic control of Germany in 1934. Holding the dual roles of chancellor and president, he became the country's supreme leader. In democracies there are always some laws that allow leaders to grab special powers; Hitler seized them all. He invoked Article 48 of the Weimar Constitution to put an end to many civil rights and suppress political opposition from the communists, and forced the passage of the Enabling Act, which allowed him to pass laws without the approval of the Reichstag and the president. He was ruthless against any opposition—he censored or took control of newspapers and broadcasting companies, created a secret police force (the Gestapo) to root out and crush opposition, deprived Jews of their rights of citizenship, seized the Protestant Church's finances, and arrested church officials who opposed him. Declaring the Aryan race superior, he prohibited non-Aryans from serving in government.

Hitler took that same autocratic/fascist approach to rebuilding Germany's economy, coupled with big fiscal and monetary stimulation programs. He privatized state-owned businesses and encouraged corporate investment, acting aggressively to raise Aryan Germans' living standards. For example, he set up Volkswagen to make cars affordable and accessible, and he directed the building of the Autobahn. He financed this substantially increased government spending by forcing banks to buy government bonds. The debts that were produced were paid back by the earnings of companies and the central bank (the Reichsbank) monetizing debt. These fiscal policies by and large worked well in achieving Hitler's goals. This is another example of how borrowing in one's own currency and increasing one's own debt and deficits can be highly productive if the money borrowed is put into investments that raise productivity and produce more than enough cash flow to service the debt. Even if it doesn't cover 100 percent of the debt service, it can be very cost-effective in achieving the economic goals of the country.

As for the economic effects of these policies, when Hitler came to power in 1933 the unemployment rate was 25 percent. By 1938 it was nil. Per capita income increased by 22 percent in the five years after Hitler took power, and real growth averaged over 8 percent per year between 1934 and 1938. As shown in the following charts, German equities rallied nearly 70 percent in a steady trend between 1933 and 1938, until the onset of the hot war.





In 1935, Hitler began to build the military, making military service compulsory for Aryans. Germany's military spending increased much faster than any other country because **the German economy needed more resources to fuel itself and it intended to use its military power to seize them**.

Like Germany, **Japan was also hit exceptionally hard by the depression and became more autocratic in response**. Japan was especially vulnerable to the depression because, as an island nation without adequate natural resources, it relied on exports for income to import necessities. When its exports fell by around 50 percent between 1929 and 1931, Japan was economically devastated. **In 1931, Japan went broke**—i.e., it was forced to draw down its gold reserves, abandon the gold standard, and float its currency, which depreciated it so greatly that Japan ran out of buying power. **These terrible conditions and large wealth gaps led to fighting between the left and the right. By 1932, there was a massive upsurge in right-wing nationalism and militarism, in the hope that order and economic stability could be forcibly restored. Japan set out to get the natural resources (e.g., oil, iron, coal, and rubber) and human resources (i.e., slave labor) it needed by seizing them from other countries, invading Manchuria in 1931 and spreading out through China and Asia. As with Germany, it could be argued that Japan's path of military aggression to get needed resources was more cost-effective than relying on classic trading and economic practices.** In 1934, there was severe famine in parts of Japan, causing even more political turbulence and reinforcing the right-wing, militaristic, nationalistic, and expansionistic movement.

In the years that followed, Japan's top-down fascist command economy grew stronger, building a military-industrial complex to protect

its existing bases in East Asia and northern China and support its excursions into other countries. As was also the case in Germany, while most Japanese companies remained privately held, their production was controlled by the government.

What is fascism? Consider the following three big choices that a country has to make when selecting its approach to governance: 1) bottom-up (democratic) or top-down (autocratic) decision making, 2) capitalist or communist (with socialist in the middle) ownership of production, and 3) individualistic (which treats the well-being of the individual with paramount importance) or collectivist (which treats the well-being of the whole with paramount importance). Pick the one from each category that you believe is optimal for your nation's values and ambitions and you have your preferred approach. Fascism is autocratic, capitalist, and collectivist. Fascists believe that top-down autocratic leadership, in which the government directs the production of privately held companies such that individual gratification is subordinated to national success, is the best way to make the country and its people wealthier and more powerful.

The US and the Allies

In the US, debt problems became ruinous for American banks after 1929, which curtailed their lending around the world, hurting international borrowers. At the same time, the depression created weak demand, which led to a collapse of US imports and other countries' sales to the US. As incomes weakened, demand fell and more credit problems occurred in a self-reinforcing downward economic spiral. The US responded by turning protectionist to safeguard jobs, raising tariffs via the passage of the Smoot-Hawley Tariff Act in 1930, which further depressed economic conditions in other countries.

• ***Raising tariffs to protect domestic businesses and jobs during bad economic times is common, but it leads to reduced efficiency because production does not occur where it can be done most efficiently.*** **Ultimately, tariffs contribute to greater global economic weakness, as tariff wars cause the countries that impose them to lose exports. Tariffs do, however, benefit the entities that are protected**