

The Debt Standard

***How our money system
plagues our world***

by Mark A Zielinski

(Available for free at Debt-Standard.com)

Book 1 of the series:

After the Great Burning

Acknowledgements

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After the Great Burning

Book 1: The Debt Standard: How our money system
plagues our world

Book 2: Value the valuable!

Book 3: Vanquishing financial problems
once and for all

Won't you help to sing,
These songs of freedom?
—Bob Marley, The Wailers, *Redemption Song*

100% Human-Written
No artificial text or graphics.

IMPORTANT

These books and web sites are not intended to suggest attacks of any sort on any individual or group. Quite the opposite. Our world is already overburdened with conflict; these books encourage respect and understanding. There is no intention here to designate anyone as evil, wrong, or bad. The intention is to point out choices that have been made, and consequences of those choices. The intention is to go beyond slogans and superficial thinking, to understand existing structures and thought forms that limit choices and opportunities so that we can *transcend* those structures and forms with more advanced arrangements and guiding principles. The existing structures will disintegrate, not through vicious attacks, but through their internal contradictions, entropy, and ultimately, their irrelevance. The goal is not conflict, but inner and outer freedom for all. Understanding is the open door to a better way.

Our money system doesn't have to be the way it is. There *are* better ways. It's our choice.

* * *

The structure of this book

In an effort to maintain the flow of ideas in this book, and to keep that flow as non-technical as possible, details on many subjects were placed in Appendices at the back of the book. Each appendix may be of great interest to some, but probably not to most readers. The appendices often contain technical details that are there for those who want them, but can be ignored without detracting from my stumbling attempt at conveying a smooth flow of ideas in the chapters.

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Part 1 — Behold the Debt Standard

Chapter 1: Economics: “Arrant nonsense” and econo-mists

A beam of light

In late 2021, a beam of light appeared in an unexpected place. A paper¹ was published on the web site of the US Federal Reserve (“the Fed”), the central bank of the United States, that began with this sentence:

Mainstream economics is replete with ideas that ‘everyone knows’ to be true, but that are actually arrant nonsense.

From the dictionary,² *replete* means “abundantly supplied.” And *arrant* means “completely such; notoriously or preëminently bad; shameless; unmitigated.” So this is not some mild rebuke. It’s a harsh denunciation.

This is also from the first page of that paper (bolding by the author of this book):

I leave aside the deeper concern that the **primary role of mainstream economics in our society is to provide an apologetics for a criminally oppressive, unsustainable, and unjust social order.**

“Mainstream economics is replete with ideas that ‘everyone knows’ to be true, but that are actually arrant nonsense.”

—Jeremy Rudd, economist at the Fed, US Treasury, and White House Council of Economic Advisors

These words came not from some dissident economist who was allowed—in an unprecedented fit of openness by the Fed—to post a radical opinion piece on the Fed’s web site. They came from a prominent insider, Dr. Jeremy B. Rudd, an economist at the Fed since 1999 and who held his first position at the White House in 1993 and at the US Treasury in 1998.

Why is this important? Because economists at central banks and in government wield increasing power over all of us. Rudd calls out this danger as he asks whether “dubious but widely held ideas serve as the basis for consequential policy decisions.” Such policy decisions can impact billions of people and are often not subject to veto by anyone.³

This set of books does *not* leave aside Rudd’s “deeper concern.” It shows precisely how our money system is the cornerstone of that “criminally oppressive, unsustainable, and unjust social order.”

¹ Jeremy B. Rudd, [Why Do We Think That Inflation Expectations Matter for Inflation? \(And Should We?\)](#), 23-Sep-2021

² [The American Heritage® Dictionary of the English Language](#), 5th Edition.

³ On US public television, in [Alan Greenspan Interview with Jim Lehrer](#), 18-Sep-2007, the long-time Fed Chairman said, “...**there is no other agency of government which can overrule actions that we take.**” No one argued the point. [bolding by the author]

Can we get evidence that this type of thinking is valid, not a lie or mere exaggeration? We can.

Does theft of \$50 Trillion qualify as “criminally oppressive”?

Please consider this headline from an icon of mainstream news, *Time Magazine*:

[The Top 1% of Americans Have Taken \\$50 Trillion From the Bottom 90%—And That's Made the U.S. Less Secure](#), 14-Sep-2020

**The Top 1% of Americans
Have Taken \$50 Trillion
From the Bottom 90%**

—*Time Magazine*, RAND Corporation

That article was based on the paper [Trends in Income From 1975 to 2018](#) from a staunch defender of the system, the RAND Corporation, which gets more than half of its funding from the US Departments of Defense and Homeland Security⁴, so it makes no sense to label this as a “conspiracy theory” in order to promptly dismiss it.

\$50 Trillion is a lot of money! That’s half the size of the entire global economy. *Time Magazine* put it this way:

...if you earn below the 90th percentile, the relentlessly upward redistribution of income since 1975 is coming out of your pocket.

Worse still, that \$50 Trillion was just in the US up to 2018. This trend is global. So the total amount taken is far more.

And believe it or not, there is a plan in place, now enshrined in international and national law after a fifty-year effort,⁵ for the ultra-rich to take far more. What one group predicts about it is that by 2030:

“You will own nothing and you will be happy about it.”⁶

It shouldn’t be difficult to guess, if we own nothing, who will own everything. They say we will be able to rent what we need. How gracious! (Yes, that last sentence is sarcasm.)

Books 1 and 2 will show precisely how “the 1%” is getting away with the theft of more than \$50 Trillion. Notice I didn’t say, “how they *got* away with” taking \$50 Trillion. I am saying that the theft is ongoing, in fact, accelerating.

How this grand theft is bolstered by the design of our money system is well and truly shrouded by econo-mists. We are not meant to understand it! Perhaps it is time we do.

⁴ Rand Corporation, [How We're Funded](#)

⁵ David Rogers Webb, [The Great Taking](#), 2023

⁶ Here is a link to [a video with their predictions posted in 2016](#) by the World Economic Forum, host of the annual meeting of the uber-rich in Davos, Switzerland. They subsequently deleted the video due to backlash to this revelation of their plans, but others saved it.



(Does this graphic imply that these concepts are totally wrong or somehow evil? No. But it does point out that, for those who are not economists, they serve as obscuring mists rather than revelations of the nature of our money system. *Book 2* has chapters on econo-mists: Chapter 2: *Why do economists get things so wrong?* and Chapter 3: *How do economists get things so wrong?*)

Chapter 2: Can the money system be changed?

Can we do anything about our money system? Most think not. When I told a wealthy friend that I was writing these books, his first comment was, “You can’t change the money system.”

Most people believe that we have lived with basically the same money system for centuries. Most have the impression that, because our paper Dollars or Pesos or Yen look roughly the same as they did 100 years ago, that the money system is essentially the same. And many believe that those who benefit most from the current system will not *allow* it to be changed.

But the world had four different *official* global money systems just during the 20th Century as we transitioned from the Gold Standard to the Debt Standard. And the periods—each lasting for several chaotic years—*between* the four officially-agreed-to money systems encompassed events such as two world wars, the Great Depression, the Arab Oil Embargo of the 1970’s, and so forth. (For more detail, see *Appendix N: From the Gold Standard to the Debt Standard: Global money systems of the 20th Century.*)⁷

...the world had four different *official* global money systems just during the 20th Century as we transitioned from the Gold Standard to the Debt Standard.

It could easily be argued that the authorities started phasing in yet another new money system in 2008, as discussed in more detail below.

So the issue isn’t *whether* the money system will change, it’s *how* it will change. We will only get a say in how it changes if we understand the true nature of both the current system and the proposals for change.

The Great Burning

This time, as change comes to the money system, it will be breathtaking. It won’t go unnoticed, as these changes did for most people during the 20th Century. We have entered a period called here *The Great Burning* during which financial assets—currencies, bonds, stocks, and so forth, which most consider wealth and which form the basis of our current money system—are highly likely to lose much or all of their “value” (actually, their *price*). This will force people to attend to what is real rather than numbers on screens, a process that has already started for some as the pandemic and geopolitics have been showing that global supply chains, on which we depend, are riddled with weak links.

For now, losses in financial assets trigger bailouts for the rich and powerful; everyone else gets little or nothing. If you think the bailouts are only occasional, think again. The bailout train has been running continuously since 2008. In the US alone, the bailouts for Wall Street have been so numerous and long-lasting that it has taken the web site *Wall Street on Parade* [more than 120 posts](#) just from 2019 through 2023 to document the ongoing tactics to keep the banking system from collapse.

⁷ Calling our money system the *Debt Standard* is not some glib criticism, it is an accurate technical description, as fully explained in [Chapters 7 through 9](#).

This book will document just how unsustainable our financial system has become, meaning that there is a high risk that bailouts will fail, consuming financial assets in a growing fire. Governments using their currency as a weapon (via sanctions, theft of reserves, and so forth) are throwing accelerant on the fire. Those who see the writing on the wall are attending less to ephemeral numbers on screens and more to the truly valuable, such as food, energy, manufacturing, supply chains, community, our own skillsets, and so forth. In my view, *The Great Burning* is inevitable: the only question is the pace at which it will unfold.

People who own financial assets will definitely feel burned by all of this. But the bright side is: Humankind will have a choice about the nature of the new money system that we build. Armed with knowledge, understanding, and common sense, we can create a far better system than the current one that enslaves so many.

Chapter 3: Systematized struggle

A child of five could understand this. Send me someone to fetch a child of five.
—Groucho Marx (1890-1977), incomparable comedian

What is our money system delivering to us right now? In a word, *struggle*. That struggle is *not* provided by your least favorite political party, but in a systematic and inevitable way by the money system itself. To demonstrate, subsequent chapters show that our money system, the Debt Standard, *guarantees* the following outcomes:

A tilted table: There is no economic “level playing field.” It is actually prohibited by law! This guarantees radical and accelerating wealth inequality, and widespread poverty, yielding persistent conflict.

Depreciating money: By design, our money (including salaries) continuously loses purchasing power, creating price inflation that is fierce for those struggling to make ends meet, that is, most people on the planet.⁸

Crushing burden of debt: Debt, which is supposed to be paid back from economic surplus and growth, has been increasing more than three times faster than the real global economy, making repayment impossible. Vast numbers of people and businesses—and most governments—struggle with a crushing burden of over-indebtedness.

Theft of time: Time, instead of being experienced as the great gift and opportunity it is, is experienced by many as a problem, a clock ticking with a relentless schedule of bills to pay, too much to do, and not enough time to do it. *Very* few people are able to dedicate sufficient time to what they consider most important in life.

Perpetual financial emergency: National banking crises happen ***eight times*** more frequently in the last 50 years than during the 1800s! It can easily be shown that we are now in a perpetual financial crisis.

A quest for infinite financial growth: Our futile attempt to repay skyrocketing debt addicts us to the pursuit of infinite financial growth despite the fact that, as currently practiced, that pursuit creates perpetual conflict and war, and risks destroying species and natural systems that are crucial for all of us.

Domination by banks: Big commercial banks, by approving and denying loans, have great power over what gets funded and what does not in our society, with fast profits as their guiding principle. They have so much power that they often dominate law-making bodies, ensuring that more and more money must flow to them from everyone else. Central banks methodically enact policies that enrich the already wealthy at the expense of everyone else.

⁸ According to [Pew Research](#), 59% of the people on the planet are living on less than \$10 per day. As difficult as that is, we all know that \$10 buys less every year. And this is not just a “poor country” phenomenon. We all know that even many with a “good jobs” are struggling financially: [70% of Americans are feeling financially stressed, new CNBC survey finds](#)—*CNBC.com*, 11-Apr-2023

Domination by Big: Power increasingly concentrates in the largest organizations (businesses and governments) at the expense of individuals and smaller communities.

And yet there are economists who defend the current money system as the best possible money system! Knowingly or not, they are defending a system that automates multidimensional theft. The few benefit greatly at the expense of the rest of us. This theft is pervasive: Yes, theft of money, but also theft of energy, time, freedom, democracy, peace, self-esteem, and even understanding of how life works. Subsequent chapters show details on each of these.

And this is not accidental. The problems above are *not* evidence, as some claim, that the system is broken. They are evidence of our current money system performing as it was designed to perform.

A single mechanism

Behind all of that struggle there is a single mechanism—described in *Chapter 7: The nature of our money and its main source*—that makes it **impossible** for us to solve those difficulties.

The problems above are *not* evidence, as some claim, that the system is broken. They are evidence of our current money system performing as it is designed to perform.

Yikes! There's a single causative mechanism for all that?

Does that mean that, if this single factor were remedied, all of the problems above would disappear? No.⁹ But it does mean that unless we remove this single mechanism, we will have **no chance** of solving the problems above. No matter who we elect or appoint, this mechanism continues to run. It is structural, built into the money system, guaranteeing that the problems above cannot be solved.

If this single factor were remedied, it would deprive all of these problems of the major river of energy that is powering them to ever-greater dominance in our world.

This mechanism must be widely understood or, after it crashes the system—which it will if it remains in its dominant position because of its inherent contradictions—the faction that benefits from it will reinstate it while we are frightened or distracted. And we are so distractible these days, swept up into latest societal storm, pushing what we consider most important out of sight, out of mind.

⁹ Though most of us often try to link a single effect with a single cause, a deeper look almost invariably shows that events of significance result from a mesh of causes that some Buddhists call *interdependent originations*. This is part of why I use the word *evidence* rather than *proof* when presenting supporting data, because pointing at a single cause tends to fall short in terms of the depth of understanding required to actually solve a societal problem. Then, you might ask, why I would cite a “single causative mechanism”? Because consequences of this foundational mechanism feed back into the system and become causes in themselves. The resulting confusing complexity allows economists to get away with emitting econo-mists, reflecting and refracting light, to obscure simple truths.

Chapter 4: The danger of extreme monopolies of wealth and power

Some likely think that while this money system may guarantee struggle for most, it must be fabulous for “the 1%.” But anyone who has read even a little history realizes that extreme wealth inequality and/or monopoly of power tends to have an expiration date, often violently announced. And it has become difficult to ignore how angry many have become, worldwide.

In truth, extreme wealth inequality is not great for anyone. Intelligent people understood this even during the time of the Roman Empire, almost 2000 years ago, with Plutarch commenting on the trouble wrought by “those yet more deep-seated and afflictive diseases of the state, poverty and wealth,”¹⁰ paraphrased in 1798 by Italian writer Ugo Foscolo:

Wealth and poverty are the oldest and most deadly ailments of all republics.¹¹

Accelerating wealth inequality can destroy societies. Times of accelerating prosperity for societies tend to be characterized by “all hands on deck” cooperation, by a sense of what can rightly be called community. But when a society’s overall tenor descends into internal conflict, then prosperity is diminished as energy is lost to internal fighting. As prosperity suffers, blame increases, crime rates accelerate, and more fighting ensues over the shrinking pie, often turning to hatred, group versus group.¹²

Copernicus (1473-1543) is famous for his intelligent work that set the stage for informing Europe that the dogma that the Earth is the center of the universe was wildly incorrect. He is less famous for listing dissension—an inevitable outcome of extreme wealth inequality—as one of the four forces that can destroy a society (see *Food for thought from Copernicus* for more). The point is, really smart people knew this hundreds, thousands of years ago.

This is something we can all keep in mind if we find ourselves (or the people we elect) spending valuable time and energy creating conflict.

Our financial system, our society, perhaps even our civilization is on the line—because our “criminally oppressive, unsustainable, and unjust” money system is radically concentrating wealth and power. Not by accident; by design!

¹⁰ Plutarch (AD 46-119), *Lycurgus*, AD 75

¹¹ Ugo Foscolo (1778-1827), *Monitore Italiano*, 5-Feb-1798

¹² The sense of community as a key ingredient in prosperity is roundly ignored. In economics, any mention of community tends to bring references to special programs designed to rehabilitate downtrodden areas, or to the “go local” movement. These are admirable initiatives, but the concept of community is thus relegated to limited domains rather than being accorded the place of honor it deserves. This is one of many examples of economics moving further and further away from the real life of people: *community* can’t be stuffed into the calculus equations and computer models expected by prestigious journals as they bolster the pretensions of the economics field that it is a “hard science.” Write about community and you won’t be published. For more detail, see the chapter *How do economists get things so wrong?* in *Book 2*.

Chapter 5: Energy flow

It followed from the special theory of relativity that mass and energy are both but different manifestations of the same thing — a somewhat unfamiliar conception for the average mind.

—Albert Einstein, quote from the 1948 film *Atomic Physics*

We talked earlier about economics being filled with ideas that “everyone knows” to be true, but it’s turning out that they are not. Solving the problems forced on us by our money system requires that we pay far *more* attention to something that everyone is taught, but almost all ignore when it comes to dealing with everyday life: Everything is energy.

If I say that our economic system is an energy extraction system, the first thought for most is our extraction of energy from nature. Yes, we do a lot of that.

But I am also referring to something deeply pernicious: Our financial system is designed to extract energy from *us*. Consider tyrants throughout history. Those seeking really big power know: Commandeering human energy is the big prize.

Our money system enables many voluntary exchanges of energy-for-energy, as it should. Much has been achieved through these voluntary exchanges. But there are some who are exceedingly determined to use *our* energy to make *their* dreams come true. And they have created a money system that does that really, really well for them. Recall the quotes above under the heading *A beam of light* from money-system insider Jeremy Rudd. If this system is not built on a nefarious foundation, then why would it need apologetics, “principles” that are complete nonsense, econo-mists that obscure truth? This set of books will document this pernicious extraction of energy.

We will also show that the flow of energy has a great deal to do with real wealth and abundance, and discuss what undeniably follows if everything is energy: Everything is connected! This is vehemently denied by some, but it is a fact that we live in an energetic continuum. Perhaps seeing this continuum as fundamental to our understanding of life will enable us to get beyond the battles—some unresolved for millennia—among the various economic “schools of thought.” Perhaps then we can attain far better economic outcomes for us all.

Chapter 6: What is money?

Isn't it crazy that we have to ask that question? It's a testament to just how incoherent our financial system has become. Some have long debates about what money is. This is from the final sentence of a paper on the topic published by the US Federal Reserve:

...there is still no definitive answer... to the question: What is money?
—Belongia and Chalfant, [Alternative Measures of Money as Indicators of Inflation](#),
Nov-1990

If you want a good laugh (or cry), consider this quote from the most famous central banker of all, Alan Greenspan:

The problem is that we cannot extract from our statistical database what is true money ... a decision to base policy on measures of money presupposes that we can locate money. And that has become an increasingly dubious proposition.
—Alan Greenspan, Federal Open Market Committee Meeting Transcript, June 2000¹³

So here's the most famous central banker saying they do not know *what* money is or *where* it is. And these folks make decisions that have so much influence that financial market participants follow their pronouncements like puppies learning to play fetch.

Most writings about money are written for professionals, or for those seeking a way to get rich as quickly as possible. Not so with this book; it is written for *all* people. So here we will use the term *money* as people generally use it:

Money is what we use to pay for goods and services, and is readily accepted for such payments in our societal setting.

This definition of money includes cash (paper currency and coin) and electronic deposits (also known as *bank account money*, or *deposits*) that are readily accessible via check writing, debit cards, wire transfers, and so forth. These electronic deposits are typically held in a checking account or savings account at a bank or credit union. Another way to phrase it is this:

Money is what is readily available to use for payments without the need to sell or convert something before it can be used to make a payment.

So, for example, a share of stock in a company is not money because we have to first convert it, that is, sell it for money, in order to use it to pay for a product.

Cryptocurrencies—such as Bitcoin, Litecoin, Ethereum, and thousands of others—are a special case and will always be called *cryptocurrencies* in this book.

¹³ Jeffrey P. Snider, [Where It All \(Should Have\) Started](#), 15-Feb-2019

The sources of money

Most people believe they already know who creates our money—“the government”—and how it is created, but very few actually do. Even many economists get it wrong. Almost all legislators get it wrong. And the truth about how our money is created is the key to understanding how that \$50 Trillion got taken by the “top 1%” from the “bottom 90%.”

The next three chapters describe how our money is created and its nature.

Understanding the nature of today’s money requires that we understand the role in money creation of three groups, and for whom they create money:

1. *Commercial banks*: These are the banks where people have checking and savings accounts, and from which they obtain mortgages, debit and credit cards, and so forth. These banks are in business to make a profit. Examples of large commercial banks are *JP Morgan Chase*, *HSBC*, and *Deutsche Bank*.
2. *Central banks*: Almost every country has one. Most are part of their national government, but some are still private banks. Examples of central banks are the *Federal Reserve* in the US, the *Bank of England* in the UK, and the *People’s Bank of China*.

(In this book, the phrase *bank cartel* refers to commercial banks *plus* the central banks, working in unison.)

3. *Treasury departments of national governments*: National governments have a way to add to the amount of money in circulation by borrowing.

[*Facts 1 through 3*](#) in the next chapter describe the mechanism at the base of the widespread struggles listed in *Chapter 3: Systematized struggle*.

If you fully understand these three [*Facts*](#), understanding the rest of the book is a breeze. If you don’t understand these facts, our money system will remain mysterious for you.

Chapter 7: The nature of our money and its main source

The process by which banks create money is so simple the mind is repelled.
—John Kenneth Galbraith, economist, professor—Harvard University, from his book *Money: Whence it came, where it went*, 1975.

Questions: Who creates our money? What is the nature of that money?

FACT 1: Commercial banks create our money—the public’s money—by lending.



Images such as this lead people to believe that all money comes from the government, but it isn't so.

When asked who creates our money, almost everyone says that our money comes from the government. Some narrow that down and say that money comes from their nation's central bank, which they typically consider to be part of the government. But most of our money, the public's money, does not come from the government or a central bank, it comes from *commercial banks*.

These are the banks where people have checking and savings accounts, and from which they obtain mortgages, debit and credit cards, business loans, and so forth. These banks are in business to make a profit.

How commercial banks create our money

Have you ever seen a sign in a bank window saying:

*Sorry, no loans
today. We don't
have enough money
on hand to lend.*

It's curious that we never see such signs. After all, we're told that people deposit their savings in the bank and the bank lends that money out to other people. If that were true (it isn't), there would certainly be times—when demand for loans is very high, such as during a real estate boom—when banks would not have enough savings on hand to make new loans.

Some people might think that we never see such *No Loans Today* signs because it must be that the government supplies more money to the banks when the banks need more. But you won't find a line item in annual budgets of governments or central banks that delivers money to commercial banks so they can make new loans.

And yet, we never hear about shortages of loan funds at banks. *And we never will* as long as the current money system prevails, because when a bank grants a loan, it **creates** the money it lends. The bank does not take money for a loan from someone else's deposit account. It is not supplied by the government. It is **new money** created by the act of bank lending.

If **you** want to lend something to someone—a ladder, for example—you need to have a ladder in your possession to lend it. For you and I—and for all businesses that are *not* banks—the same is true of money. We need to have money in our possession before we can lend money to someone else.

But that is not true for banks. They have a license from their government to create money from thin air in the form of loans. The act of lending *creates* the money they lend. And they then charge borrowers interest on that money, and thus profit from the money they created.

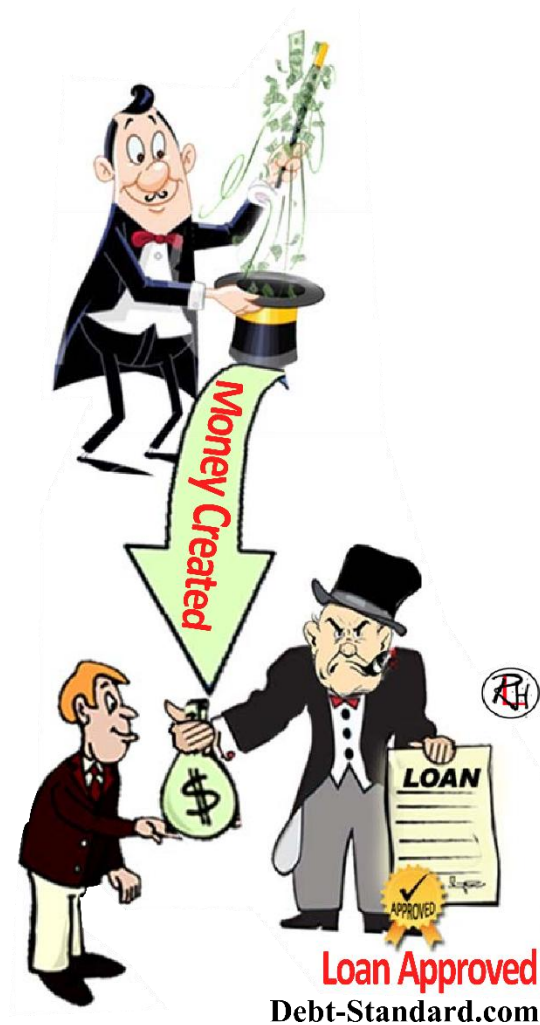
**The actual process of money
creation takes place primarily
in banks.**

—US Federal Reserve Bank of Chicago,
Modern Money Mechanics, Rev. 1992, P. 2.

Let's start a graphic that shows how this works. We all know that banks make loans:



But few know that the banker conjures that money like a magician, **creating** the money being lent:



This has been understood by some for at least a hundred years, but it is not widely known. In fact, it is often denied by people who claim to be experts. Yet here it is, stated by a cabinet-

level government official, Robert B. Anderson, then Treasury Secretary of the USA, who gave this quote to the magazine *US News & World Report* in August, **1959**:

When a bank makes a loan, it simply adds to the borrower's deposit account in the bank by the amount of the loan. The money is not taken from anyone else's deposits; it was not previously paid in to the bank by anyone. It's new money, created by the bank for the use of the borrower.

Here is the same idea from the central bank of the UK, the Bank of England, in its [Quarterly Bulletin](#) from the first quarter of 2014. The bolding of the final sentence in the paragraph was done by the Bank of England:

Commercial banks create money, in the form of bank deposits, by making new loans. When a bank makes a loan, for example to someone taking out a mortgage to buy a house, it does not typically do so by giving them thousands of pounds worth of banknotes. Instead, it credits their bank account with a bank deposit of the size of the mortgage. **At that moment, new money is created.**

“Commercial banks create money, in the form of bank deposits, by making new loans.”

—Bank of England, central bank of the UK

And here's a relevant quote from a commercial banker from a two-minute video called *Where does money come from?*:

[People think that] basically, the banks sit there, they wait for deposits to arrive, and if they have enough deposits, they lend them out to somebody else. And that is completely wrong. This is the wrong model of banks because what happens in reality is exactly the opposite. Commercial banks create money, in the form of bank deposits, by making new loans. And I've done this, I'm a banker, I know that's how it works, and you can read it on many central bank web sites—that banks, when they decide: the economy is good, we are optimistic, we are now making loans. They don't need to wait for any deposits because, when they make a loan, they **create** the deposit, right there. Banks create money, out of thin air.

Discussions that seek to show the true nature of our money often call it *fiat money*, meaning that our money does not have intrinsic value, but has value only by government decree. There is truth in that, but it is a partial description, and obscures a deeper view. It contributes to the idea that our money comes from government when the reality is that almost all of the money we use every day comes from for-profit, commercial banks, that is, it comes from corporations.

Most money in the modern economy is in the form of bank deposits, which are created by commercial banks themselves.

—Bank of England, [Quarterly Report](#), Q1 2014, P. 4.

Commercial bank money makes up most of the money that people actually use.

—European Central Bank, [What is money?](#)

How much of our money comes from commercial banks? The Bank of England (BoE) researched this issue for the UK in 2013 and found that less than 3% of money held by the public was in the form of paper currency and coins printed and minted by the government.

The rest, more than 97%, was in the form of electronic deposits, that is, money in bank accounts. And what was the source of those electronic deposits, that is, over 97% of the public's money? It was loaned into existence by commercial banks!

This situation prevails in all major economies, including “Communist” China.

Our money is Corporate Currency

So, yes, national money is “fiat money,” declared to be so by government command. But think it through: If the money is created by a commercial bank, then it might be more meaningful and revealing to call it **corporate currency**. *The money in our bank accounts was issued by a corporation, not the government.*

For purposes of this book, it is essential that you understand *Fact 1*, that corporations—that is, commercial, for-profit banks—are the creators of most of the money we use every day.

And knowing this, you know more than almost all politicians, and even many economists:

The money in our bank accounts was issued by a corporation, not the government.

It proved extraordinarily difficult for economists to recognise that bank loans and bank investments do create deposits.

—Joseph Schumpeter, *History of Economic Analysis*, 1954, P. 324

Schumpeter, an economist famous for his phrase “creative destruction” to describe economic progress, said this in 1954 in a very famous economics book, yet the statement still holds true!

“Banks manufacture money like steel plants manufacture steel”

Want one more quote on the topic? In 1939, to understand the Great Depression and how such an event could be avoided in the future, the government of Canada convened the Standing Committee on Banking and Commerce. Graham Towers, Governor of the Bank of Canada from 1935 to 1955, was asked whether commercial banks create money:

That is what they are for... That is the Banking business, just in the same way that a steel plant makes steel... Each and every time a bank makes a loan ... new bank credit is created — new deposits — brand new money. Broadly speaking, all new money comes out of a Bank in the form of loans. As loans are debts, then under the present system, all money is debt.

Let's take up the final sentence from that quote in [Fact 2](#).

Objections

For those who still believe that the government or its central bank is the primary creator of money, please see *Appendix A: Illusion*—“*All of our money is created by the government (or its central bank)*”. One surprise there for most people is that non-US commercial banks create more US Dollar deposits than US commercial banks!

For those who believe that banks don't create money, but are merely intermediaries between savers and borrowers, see *Appendix B: Illusion—“Banks don't create money, they are intermediaries between savers and borrowers”*.

For those who believe that money is created by what is called the money multiplier effect, see *Appendix C: Illusion—“Money is created by the money multiplier effect”*. For those who like charts, the first chart in *Appendix C* shows the matching quantities of bank deposits and bank loans in the USA that lasted for decades.

For anyone interested in how modern banking got started with money creation, see *Appendix I: The goldsmiths—progenitors of modern banking*.

FACT 2: In the current system, money is an IOU, that is, a debt.

When it weighed in on the *nature* of our money, the Bank of England, the central bank of the UK, said this:

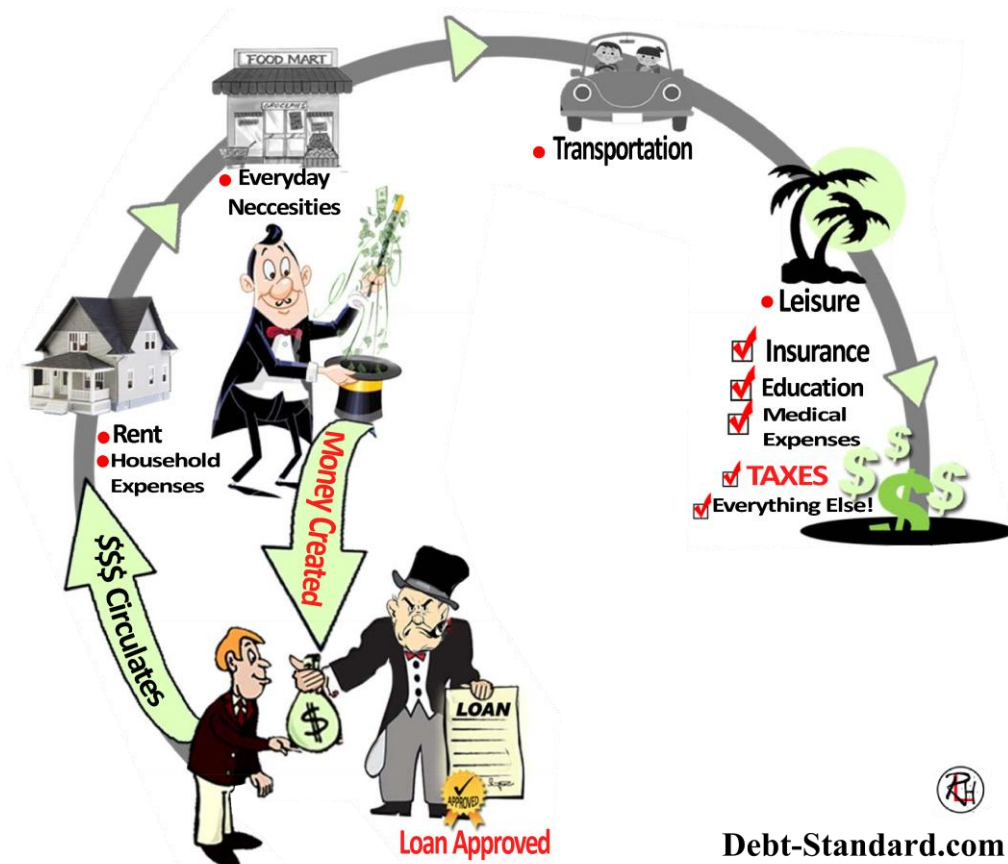
Money in the modern economy is just a special form of IOU.

—Bank of England, [*Quarterly Report*](#), Q1 2014, page 6

In English, IOU sounds like and stands for the phrase “I Owe yoU.” If you give someone a \$5 loan, they might give you a piece of paper that says, “IOU \$5.” It expresses an obligation to pay back the stated amount.

So the Bank of England is saying that our money is an IOU. *What?* When most people see a pile of Euros or Dollars or Yen, they think they are seeing wealth, not IOU’s, which are records of debts.

[*Fact 1*](#) described how our money gets created: A person goes into a bank and asks for a loan for \$1,000. If the bank agrees, it creates an entry for \$1,000 in the borrower’s account in exchange for the borrower’s promise to repay \$1,000 later. When the borrower spends that \$1,000, that money starts to circulate in the economy. Maybe the borrower buys some furniture with that money. Then the furniture supplier pays their employee, the employee spends that money on rent, the employee’s landlord pays a carpenter for a repair to the premises, and so forth. That is how money enters and remains in the economy: it gets created by a bank loan and then circulates, that is, it passes from one party to another.



Money is created by a banker making a loan, then that money is spent into the economy and circulates from one party to another.

There's an extremely important implication in this: For anyone to *have* that \$1,000, someone must first borrow that \$1,000 into existence, that is, that initial borrower owes \$1,000. So one party *has* an amount of money, and another party *owes* that amount of money. In our current money system of national currencies, this is the rule. There are no exceptions.¹⁴

For anyone to *have* that \$1,000, someone must first borrow that \$1,000 into existence, that is, that initial borrower owes \$1,000.

Now let's ask this question: What is a debt?

The word comes from the Latin *debere*, to owe, and *debitum*, something owed. That's the general understanding of it: one party owes something, usually money, to another party. And that's what an IOU represents: one party owes, and the other party is owed. So that's what the Bank of England meant: our money is a form of debt.

¹⁴ Some might claim that base metal coins are an exception, but with today's coins, it is rare and usually temporary that the value of the metal content of coins matches or exceeds their face value. And coins are a miniscule part of today's money supply. Others consider gold, silver, and/or cryptocurrencies to be money, but we are talking here about the official money system that dominates global finance, and those who run that system, i.e., central bankers, classify gold, silver, and cryptocurrencies as assets, but not currently money. That may, of course, change.

Here's a quote from Marriner Eccles, chairman of the US Federal Reserve from 1934 to 1948:

If there were no debts in our money system, there wouldn't be any money.
— Marriner Eccles, Testimony to the US Congress, 30-Sep-1941

This can be very confusing because most people think of our money as wealth. Many think that money is the very *best* form of wealth because, they thoughtlessly say, "Well, you can use it to buy *anything!*" Most people these days have a tough time even *conceiving* of wealth if they can't say what something is "worth" in their national currency. "That coat is worth \$100." "That car is worth \$10,000." "That house is worth \$100,000." "That person is worth insert financial net worth," as if the worth of a person can be expressed in money!!

However, we saw in [Fact 1](#) that the money we use every day comes into being when a bank lends money to a borrower. The person named on a loan agreement **owes**; whoever receives that money **is owed**.

Our two-faced money

"In Debt We Trust"



Debt-Standard.com

*Every Dollar, Yen, Euro, and so forth, is two-faced: a debt for one party,
and an asset for another.*



So our money is two-faced. If you consider your deposits in a bank, your name is on the account so you consider the deposits in that account to be *your* money, that you *own* it. But the bank doesn't have a stack of money with your name attached stored in its vault. Once you deposit money in the bank, by law, it's the *bank* that owns the money, and they *owe* that amount to you, the depositor. And in normal times, the bank will pay what they owe you when you demand some or all of that money by making a withdrawal, writing a check, or using a debit card.

So your "money in the bank" is a debt from the bank to you, they owe it to you, you have loaned them that money.

So now we have a clear definition for our money: *Our electronic money is a record of who owes what to whom.* It would be more precise if we called it *bank credits* rather than money, but almost everyone calls it money, so we will as well. But we'll call it *bank credits* from time to time to remind ourselves of reality. (And as another reminder of reality, we'll sometimes call it *corporate currency* since it came from a corporation.)

So now we have a clear definition for our money: *Our electronic money is a record of who owes what to whom.*

Our money being two-faced is no trivial matter. It puts duality right smack in the middle of many of our interactions with other people. And people wonder why there is so much tension, division, and conflict on our planet today.

Physical cash is also debt

Some are probably thinking at this point: “OK, maybe you are right that bank account money is debt, but surely physical cash and coins are not debts.” To address this point, look closely at this section from a British £20 note:¹⁵



Debt-Standard.com

Under the name of the Bank of England, it says, in small type, “I promise to pay the bearer on demand the sum of Twenty Pounds.” So it’s a “promise to pay,” also known as an IOU, from the Bank of England. And what do they promise to pay? If you present this Twenty Pound note, they will pay you ... a Twenty Pound note! So, paper money for paper money. Or if you deposit it at your commercial bank, they’ll add Twenty Pounds to your bank account, so you can get electronic money for the paper money you deposited.

In the UK prior to 1931, that “promise to pay” meant something different; it meant you could redeem the paper money for gold. Prior to 1914, the same was true in 50 countries. Here’s an image of a US \$20 banknote from 1905, when it was redeemable, as it says at the bottom, “IN GOLD COIN—PAYABLE TO THE BEARER ON DEMAND”:

¹⁵ An image of a full £20 note would be placed here for your convenience, but the Bank of England (BoE) has pushed the makers of color printers to fail on any attempt to print an image of British paper currency, so if you tried to print this page on your color printer, if it had such an image, the page would fail; the printer simply halts. This should give you an idea of the power and reach of organizations such as the BoE.



US \$20 banknote from 1905, redeemable for gold coin

But in the UK, that ended in 1931 when the British government and its banks defaulted on the promise to redeem paper banknotes for gold. The USA followed with that same default in 1933.¹⁶

Some say that while our money used to be backed by gold, now it is “backed by nothing,” but that isn’t precise. The money in our system is backed by the ability and willingness of borrowers to pay their debts. Banks extend credit because they believe that borrowers have *credibility*, that is, the bank *believes* the borrowers will repay their loans, so they give them *credit*, that is, they lend them the bank credits that we call money. If the borrowers who owe money to banks can pay back their loans in the expected fashion—and the bank cartel is not creating too many of these bank credits too quickly—the public’s money retains much of its purchasing power, at least in the short term, for buying real items or services.

As we saw starting in 2007—when millions were unable or unwilling to pay their mortgages—if a large enough group of borrowers turns out to be unable to pay their bank debts, then people start to fear a domino effect or contagion, that is, if Peter can’t pay Paul, then Paul can’t pay Mary, and so forth, in a chain reaction. *Beliefs* in who will be paying up come into question, and the financial system quickly becomes very unstable because no one knows just how far the chain reaction will go. Some realize it might take down the entire house of cards.

¹⁶ Cheerleaders for the current money system claim the US has never defaulted on its debts. But what do you call it when a country says, “You know that paper we issued that said we would pay you some gold? Well, now you can’t get gold anymore, all you can get is paper that we print up.” A piece of paper instead of a gold coin? That sure sounds like a default, defined in dictionaries as “failure to fulfill an obligation.”

The Debt Standard

The nature of the world's money system changed during the Twentieth Century, from the Gold Standard to the Debt Standard.¹⁷ We started with gold-based and silver-based money; we ended with *debt-based, credit-based* money: bank credits, based on *beliefs* that people will be able and willing to pay their bank debts.

The nature of the world's money system changed during the Twentieth Century, from the Gold Standard to the Debt Standard.

Calling these bank credits *money* is actually a twisting of language to pretend that the transition from tangible money to debt-based IOU's was not important, or never happened. And almost everyone has the idea that these bank credits come from the government, but, as stated above, actually it is more accurate to call most of such money *corporate currency*.

Humanity expends a tremendous amount of energy each day in pursuit of bank credits, of corporate currency:

Currency cannot be redeemed, or exchanged, for Treasury gold or any other asset used as backing. The question of just what assets "back" Federal Reserve notes [physical cash in the US] has little but bookkeeping significance.
—Federal Reserve Bank of New York, [*I Bet You Thought*](#), 1977

So, according to the US Federal Reserve, your money is a bookkeeping entry. Isn't that comforting?

Objection

If you would like more detail and clarity on our money being debt, see *Appendix D: Illusion*—"My money is not debt".

So, according to the US Federal Reserve, your money is a bookkeeping entry. Isn't that comforting?

¹⁷ We've all heard people refer to some product or service as the "gold standard" in its field, indicating the speaker's claim that the product or service is by the far the best. However, we've never heard anyone refer to their product as the "debt standard" of its field because that doesn't sound like something to boast about. I am not aware of anyone who refers to our current money system as the "debt standard" despite it being the most accurate name for it. As said earlier, we are not meant to understand our money system.

FACT 3: The money created by bank loans circulates from one party to another and then is destroyed when a bank loan is paid off.

I'm afraid that the ordinary citizen will not like to be told that the banks or the Bank of England can create and destroy money.

—Reginald McKenna, ex-Chancellor of the Exchequer, UK, **1928**, from *Postwar Banking Policy*, p. 93. London: W. Heinemann.

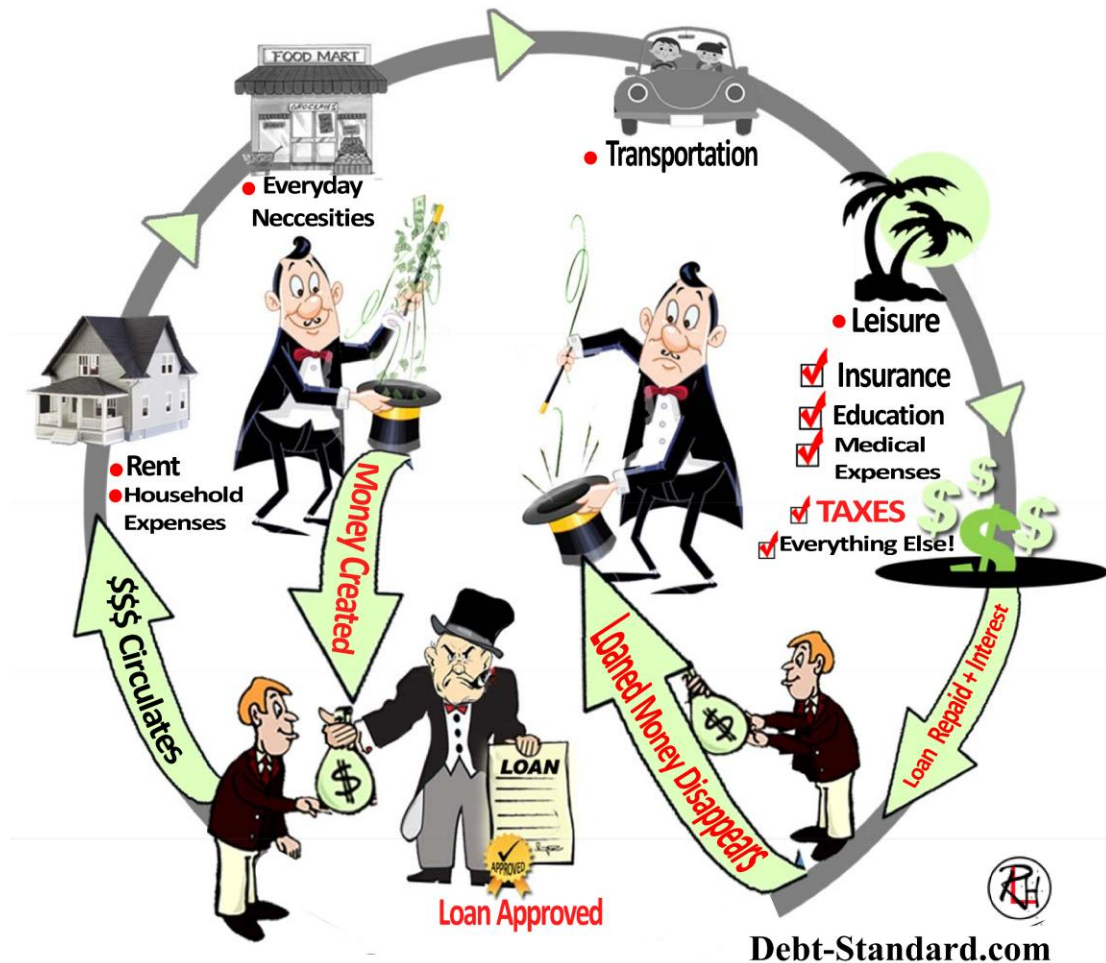
We need to establish one more detail before exploring the crucial role that the nature of our money plays in many of the world's worst problems. And once you grasp *Fact 3*, you'll be one of the very few people who understands the nature of our money.

The Bank of England stated in 2014:

Just as taking out a new loan creates money, the repayment of bank loans destroys money.

—Bank of England, [*Quarterly Bulletin*](#), 2014 Q1, p. 16.

Now we can see the full picture: The public's money is created by a loan made by a banker to a borrower. That money circulates in the economy, and then is destroyed when the borrower pays off the bank loan. We can now complete the money life-cycle graphic, shown on the next page:



Our money is conjured from the banker's hat, circulates, and, when a bank loan is repaid, the amount borrowed disappears back into the hat. The interest paid goes toward the bank's expenses and profits.

What? This flies in the face of how almost everyone thinks about money. People think of our money as persisting once it has been created. But this *crucial* fact about the destruction of money is true nonetheless.

This all comes back to the *fact* that almost all of *our money* is *mainly a set of computer records of who owes what to whom*. So when the *owing* side of the record is canceled by a person paying off a loan, the *owed* side of the record (money owed to the bank) is also canceled. Poof! What *was* money is now gone. It no longer exists. It no longer circulates in the economy. In the center of the graphic above, we see a banker conjuring new money from the magician's hat to lend, and then it is destroyed as it disappears back into the banker's hat.

An example: Money created and then destroyed

Here is a clear example of how money creation/destruction works. Let's say Ms. Smith needs a \$7,000 loan for a used car. She goes to her bank and signs a loan agreement to pay off the \$7,000 loan over three years at 7% interest.

The bank records the loan as an asset for themselves, on which they expect to receive payments monthly for three years until the loan is paid back, plus interest.

The bank also enters \$7,000 as an asset in the account of the Ms. Smith. How did they create that money? By typing entries into their computer system and then getting Ms. Smith to sign a loan agreement.

So two assets were created, one for the bank (the \$7,000 loan) and one for Ms. Smith (a \$7,000 deposit in her checking account). Both the bank and Ms. Smith expect that Ms. Smith will be writing a check to the automobile dealer for the used car. But the car gets damaged on the used car lot and the deal falls through.

Ms. Smith returns to the bank and asks whether the loan can be canceled. The bank says it cannot be canceled, but Ms. Smith can simply pay off the loan in full and the bank will waive any interest, fees, or penalties. So Ms. Smith writes a check to the bank for \$7,000.

Now this is the important fact—*both assets disappear*. The loan, the asset of the bank, no longer exists: it's been paid off. And the \$7,000 deposit, the asset of Ms. Smith, is gone as well: it was used to pay off the loan. Neither party retains anything of value from the transaction.

So what happened to the \$7,000? First it was created, and then it disappeared, it was destroyed. Here's what we all need to understand because it has serious consequences: *When someone pays off a bank loan—whether immediately or over three years or over thirty years—the money disappears as the bank loan is paid off.*

This doesn't seem right to most people, but it reveals an important truth about our modern money system. Almost all of what we consider to be "money" is a set of digital entries in the accounting systems of banks. *Every* instance of money is a credit, an asset, or a deposit for one party; and a debt, or liability, for another party. One party owes money to the other party. That's what our electronic money is: *a record of who owes what to whom.*

Here's a great quote on this topic by a top manager at the US Federal Reserve written in **1935**, a couple of years after the US defaulted on its promise to redeem paper money for gold on demand. It captures the essence of the problem:

If all the bank loans were paid, no one could have a bank deposit, and there would not be a dollar of coin or currency in circulation. This is a staggering thought. We are completely dependent on the commercial Banks. Someone has to borrow every dollar we have in circulation, cash or credit. If the Banks create ample synthetic money we are prosperous; if not, we starve. We are absolutely without a permanent money system. When one gets a complete grasp of the picture, the tragic absurdity of our hopeless position is almost incredible, but there it is... It is so important that our present civilization may collapse unless it becomes widely understood and the defects remedied...

—Robert Hemphill, Credit Manager of Federal Reserve Bank, Atlanta, Ga. Source: The foreword to a book by Irving Fisher, entitled *100% Money* (1935)

That's an excellent phrase used by Hemphill—*synthetic money*.

And here's what the Bank of England has to say on the same topic (bolding by the author):

Money in the modern economy is just a special form of IOU, or in the language of economic accounts, a financial asset.

Financial assets are simply **claims** on someone else in the economy — an IOU to a person, company, bank or government.

Because financial assets are claims on someone else in the economy, they are also financial liabilities — **one person's financial asset is always someone else's debt...** In contrast, non-financial assets are not claims on anyone else. If someone owns a house or some gold, there is no corresponding person indebted by that amount — so there are no non-financial liabilities. **If everyone in the economy were to pool all of their assets and debts together as one, all of the financial assets and liabilities — including money — would cancel out, leaving only the non-financial assets.**

—Bank of England, [*Quarterly Bulletin*](#), 2014 Q1¹⁸

Think about it this way: We have established that for me to *have* a Dollar, someone must *owe* a Dollar. If that someone goes to the bank and pays off their loan, then the *owing* part is gone, which means that the *owed* part is gone as well.

Does that mean one of my Dollars disintegrates when someone pays off the specific loan that created my Dollar? No, because there is no persistent link between a *particular* Dollar and the particular loan that created it. When money is created by a loan, that money is generally spent and goes into the large circulating pool of money. Lots of people obtain loans and then all that money passes from butchers to bakers to candlestick makers. It circulates until that money is used to pay off a bank loan.

Intelligent people who have spent their life thinking about money systems have trouble understanding the above, so *Appendix F* explains this concept in much greater detail, that is, in accounting detail. So, if you disagree with this *Fact 3*, then please go now to *Appendix F: Illusion*—“*The idea that money is destroyed when bank loans are repaid is wrong*” for the proof.

¹⁸ This quote is a great argument for owning outright what is real—for example, as the BoE says, “a house or some gold”—rather than financial assets. See *Book 2* for more.

Rest Stop 1

Whew! Time to rest. 😊 And congratulations: You have now passed through the most



difficult part of this book!

For most, those three [Facts](#) are a lot to take in, and it takes time for people to “wrap their head around them.” Not because the [Facts](#) are complicated; they aren’t. It’s because people have been told that money and its creation is something other than what it actually is. The toughest idea for most people is that our money is an IOU, a debt. But some of our printed money tells the truth right on the note, saying it is a “promise to pay,” or it’s called a “note,” which is short for “promissory note,” that is, a promise to pay.

If the three facts seem hazy, reading them again may be worthwhile because they are key to understanding the consequences in *Part 2*. Many of the consequences are direct results of [Facts 1-3](#). And those consequences have consequences; they are what people call second-order effects. (*Appendix Y* calls all that together a *Chained Reaction*.¹⁹) These consequences are strongly involved in some of the world’s nastiest problems. So understanding [Facts 1-3](#) is crucial.

What we established is really very simple. The money we use every day, and in our bank accounts, is not created by the government, as most people suppose. It is created by banks. What happens is this:

1. Commercial banks make loans, which creates our money, the public’s money;
2. The money circulates;
3. When a bank loan is paid off, the money is destroyed, it disappears.

¹⁹ A person can print out the list in *Appendix Y: Chained Reaction* to use as a “scorecard” for their understanding of the chapters in this book.

Chapter 8: Central banks as money creators

Question: How are the central banks involved in money creation?

Central banking is a very large topic. This chapter will only describe their involvement with money creation, briefly addressing past, present, and future.

Past and Present: Creation of Bank Reserves

The primary money creation role of central banks is creating a type of money called *bank reserves*.²⁰ These electronic bank reserves are used only by banks and their national government when money circulates among them. You and I can't have or use bank reserves. And despite what some so-called experts claim, bank reserves cannot be lent out to the public.

[Chapter 7](#) showed how commercial banks create money for us: by conjuring money from the magician's hat and loaning it to us. Central banks have a banker-magician's hat from which they conjure banks reserves by making loans to commercial banks.

Now that you know that, congratulations! Combine the information in [Chapter 7](#) with the preceding paragraphs and you have the essential knowledge about direct money creation in our money system: Everything that counts as money in our system is debt! No matter who creates it—commercial banks or central banks—***one party owes and another party is owed***, that is, our money is a record of who owes what to whom, also known as a debt. Our Dollars, Yuan, Euros, Yen, and so forth should really be called *bank credits* instead of *money*, that is, our money is credit created from nothing by a bank.

That is why *Debt Standard* is the best name for this money system.

If you want more information about bank reserves, see *Appendix Zero: Bank reserves are also debt*. To see how bank reserves function as payments move among banks, see *Appendix F: Illusion—“The idea that money is destroyed when bank loans are repaid is wrong”*

Past and present: Influencing interest rates

Central banks exert a good deal of influence on just how much money commercial banks create for use by the public. Their main tool for this is by pushing interest rates lower to encourage more lending and borrowing (to stimulate more economic activity), or raising interest rates to slow down the money creation process (to slow down the growth of economic activity).

²⁰ Such money has multiple names depending on who's doing the talking (for example, *base money* or *high-powered money*), but those terms are a bit old-fashioned. Today, most use the term *bank reserves*.

Lowering and raising interest rates has been the main tool of central banks in their attempts to manage the economy.

Since 2008—“Going Direct” with QE

In Japan in 2001, the US in 2008, the UK in 2009, and the European Union in 2015, central bankers entered the fray of money creation for the public. They were not happy with the pace at which commercial banks were creating money by making new loans to the public. So the major central banks each started a program called *quantitative easing* (QE) that had the effect of creating new bank reserves for use by commercial banks *and* new money for use by the public. For details on how QE works, see *Appendix L: Quantitative Easing*.

The near future—“Going direct” via CBDCs?

QE was the first major foray into what some central bankers call “going direct,” that is, central banks have gone beyond their traditional role of creating bank reserves and have come up with ways to create money directly for use by the public. And they are developing the capability to become a major money creator for all of us via what they call Central Bank Digital Currencies (CBDCs). This could be a major change in our money system.

If CBDCs were to become the only national currency, it would give the central banks complete visibility into all financial transactions, eliminating any remaining privacy in money transactions. And because CBDCs are programmable, some are rightly worried that they will be used to control what and from whom people can buy, where they can travel, how quickly they must spend their money, and so forth, seriously limiting freedom. Even if the originators of CBDCs have no such intentions²¹, how long, on this planet, do you think it will take those who seek only money and power to do whatever it takes to gain control of such a powerful tool? The tyrants of old could not even imagine a tool with such pervasive control. Powermongers are already mentioning having “absolute control” in such matters. As they always do, they claim this will be a benefit to us.

Past, present, and future: More central bank power

Every time there is a financial crisis, panicked politicians and regulators call on central banks to “fix” the problem because they are the ones who can create \$Trillions of new loans without anyone else’s agreement. Each time, the central banks end up with more power. For

Numbers: How raising and lowering interest rates works; in theory

When central banks make monetary conditions “more easy” by pushing interest rates lower, it makes borrowing easier, that is, less expensive, and thus more attractive (at least in theory), to more parties.

For example, if a person obtained a 30-year mortgage for a house costing \$200,000 with the interest rate at the highest mortgage rate ever in the US—that is, at the 16% rate that prevailed in 1981—their monthly payment would have been \$2,690.

If they obtained that same mortgage at a 4% interest rate, their monthly payment would be \$843, that is, \$1,847 less per month.

Clearly, there would be far more people who could afford \$843 per month than could afford \$2,690 per month. This lower interest rate tends to get more people to borrow to purchase homes, cars, and so forth. The same holds true for businesses deciding whether to purchase new equipment or build a factory.

The heading says this works “in theory” because sometimes, no matter how low the interest rate is, many people choose not to borrow and/or banks choose not to lend.

²¹ A few have stated that they have precisely such intentions, as described in *Chapter 36*.

example, central banks are called in when banks are in trouble. This gives them great power because, in a world of debt, they are often the main decider about whose bad debts will be “waved away with the magic monetary wand,” and who will be left to go bankrupt. Expect the trend of increasing central bank power to continue.

Much more could be said about central banks

Many thousands of words are written daily about central banks: what they have done, are doing, and might do. Our task in this section was to describe their role in money creation.

There are other important issues relating to central banks. Some of those will be discussed in subsequent chapters, with the following topics briefly covered in *Appendix M*:

Understanding central banks for those who are interested:

1. Understanding the actions of central banks
2. Why did major commercial bankers create central banks in the first place?
3. What is meant by “full faith and credit”?
4. Who owns the world’s major central banks?
5. Who created the world’s major central banks? And what’s going on with their connection with war?
6. What’s going on when, every time there is a financial crisis, central banks get more power?

Chapter 9: So is “the government” a money creator?

So now that you know that the money we (people, banks, and governments) use every day is created by the bank cartel, we can revisit the question of whether or not the national government is a money creator.

The answer is a qualified ‘yes.’ How do they create money? By borrowing! (What a surprise, eh? 😊)

Here’s how it works, using the US as an example: The government lets people know that it wants to borrow some money. People and companies save up Dollars and lend them to the government. In return, they receive from the government, for example, a *US Treasury Bill* (“T-Bill”).²² A T-Bill is a promise by the government to pay the buyer back what the government borrowed plus some interest at a set time, for example, \$1 million in 90 days.

So you might be thinking: If someone had to fork over a million banker-created Dollars for the T-Bill, how does that create any new money? It does because for those we can call the *Big Players* (large corporations and financial organizations), that T-Bill due in 90 days is like a Million Dollar Bill.²³ If Big Player 1 is buying a factory complex from Big Player 2, Big Player 1 doesn’t have to sell that T-Bill for cash, they can use it just like cash for the purchase.

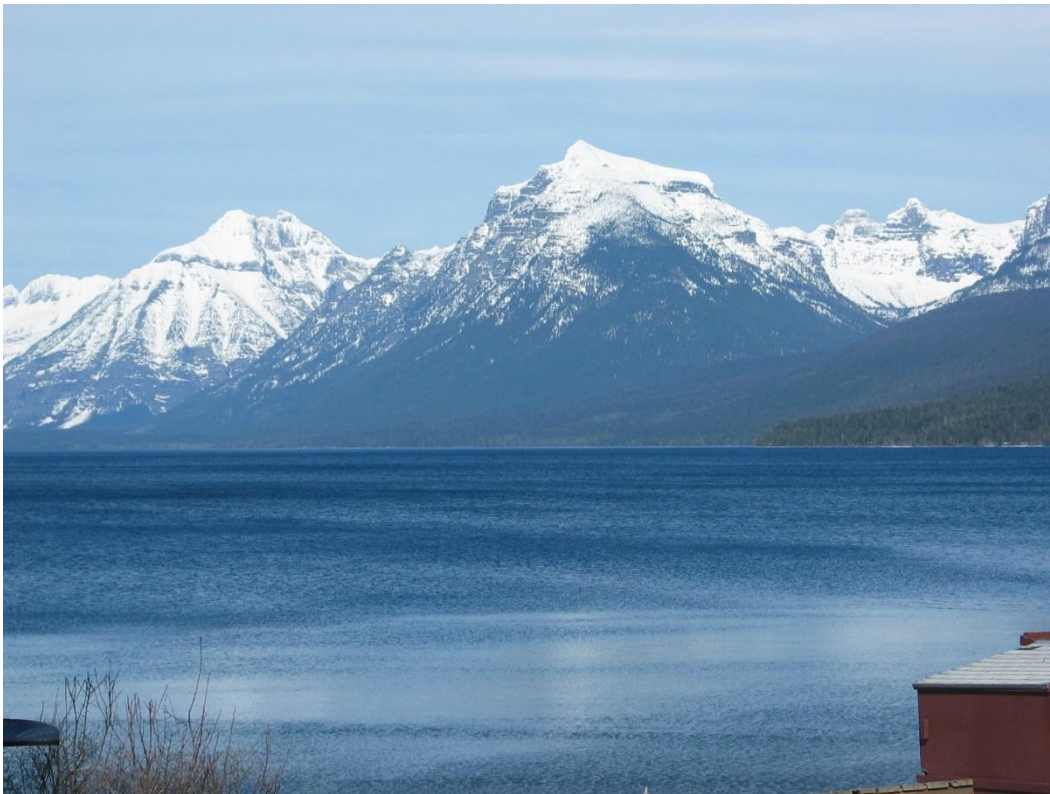
So instead of the Big Player having \$1 million sitting idle in their bank account, they lend that \$1 million to the government, they receive and hold a T-Bill, and the government spends that \$1 million back into the economy where it circulates instead of sitting idle in Big Player’s bank account. So the amount of money in circulation has in effect been doubled: The banker-created \$1 million is back in circulation, and the T-Bill is the equivalent of \$1 million among the Big Players. So in effect, there’s now \$2 million circulating instead of \$1 million.

For more details on how this works, see [The Other Money Printer](#), 25-Jan-21, at FedGuy.com, a web site created by Joseph Wang who was a trader at the Fed and understands the plumbing of our money system.

²² The equivalents to US T-Bills are called *Bubills* in Germany, *Gilts* in the UK and India, Treasury Discount Bills in Japan, and so forth.

²³ T-Bills are sold in smaller and larger denominations, from \$100 up to \$10 million. The “Million Dollar Bill” is just one example. The market price of each T-Bill fluctuates but is available—to the penny—to the Big Players on their computer screens because US T-Bills are traded 24 hours a day in New York, London, Tokyo, and so forth.

Rest Stop 2



(Source: Photo by the author)

Break time! Maybe a nice cuppa, as the Brits say, while checking in with nature to counter the impressions from our rather unnatural money system.

So now you have the money creation picture. The bank cartel is the *direct* creator of money in our system:

- Commercial banks create money for use by the public.
- Central banks create money (bank reserves) for use among banks and the national government. And since 2008, they've started to encroach on the territory of the commercial banks by "going direct," that is, they have started creating money for use by the public as well. Not as much as the commercial banks. At least not yet.

And the national government *indirectly* creates money by borrowing. In the US, they do so by selling T-Bills for some of those banker-created Dollars. The T-Bills function as "Million Dollar Bills" among the Big Players, and the government spends the borrowed Dollars back into circulation.

All of those types of money are debt, which is why the correct name for our money system is the *Debt Standard*.

Now that you have visibility on our three money creators, you might often notice that when one of these creators believes the other creators aren't creating enough new money, they rev up their portion of money printing presses.

Chapter 10: Why have the wisdom traditions of the world given such stark warnings about debt?

...the borrower is slave to the lender.
—Book of Proverbs 22:7, *Judeo-Christian Bible*

Let's digress for a moment.

Now that we know that all types of what are considered to be money in our current money system are debts, where one party owes and another party is owed, we can consider something strange: Almost all of the wisdom traditions on this planet gave stark warnings against debt. These warnings, and even prohibitions, came from major religions (Hindu, Jewish, Buddhist, Christian, and Islamic); major Greek philosophers such as Plato and Aristotle, who are considered the fathers of Western philosophy; major thinkers of the Roman Empire such as Cicero and Seneca; and great writers throughout history including Shakespeare, Dickens, and Emerson. When scientists—for example, Frederick Soddy or Philip B. Smith—take time from their own profession to analyze the money system, they are baffled that people put up with it. There are contemporary political writers who recognize debt as a perpetuation of colonialism (*Neo-colonialism*), and some feminist writers who recognize debt “as an apparatus of colonization” of women’s labor and bodies.²⁴

Almost all of the wisdom traditions on this planet gave stark warnings against debt.

And yet here we are, with debt as the nearly-unchallenged basis of our financial system! As said, we live with the Debt Standard.

For now, let's keep this “in the back of our mind” while we consider the consequences of debt-based money described in the following chapters, where a clear view will emerge of just why the wise have perennially warned about debt. And we'll discuss in greater depth the view of the wisdom traditions on debt in the chapter *What to do about debt* in *Book 2*.

²⁴ See *CADTM.org*, [Debt Is A War Against Women's Autonomy—Interview with Verónica Gago and Luci Cavallero](#)

Another digression: Black and white thinking

Some might here conclude: “The author is totally against debt!” This is not the case. In my view, debt is a powerful tool that, like many powerful tools, can be used well or poorly. I work hard to not fall prey to that type of black-and-white thinking in which someone might say, “All debt is bad!” In my view, such thinking is usually the hallmark of the superficial claims now widespread in our public discourse. We often hear, “Statement X is absolutely true; its opposite is absolutely false. Anyone who disagrees is evil.” But this ignores the fact that life exists, as stated in *Chapter 5: Energy flow*, on an energetic continuum. Black-and-white thinking tends to ignore the spectrum of nuances that exist between supposed absolutes, preventing the search for commonality and agreement that is crucial to the cooperation required for positive movement for humankind. The brevity required on social media platforms exacerbates the problem. We need deep thinking and insight, not superficial slogans and accusations, to move ourselves forward! And we need questions, more and more brilliant questions!

Chapter 11: Lots of people want to be money creators now

Anyone paying attention has noticed that there is a blizzard of new candidates for use as “money”: many thousands of cryptocurrencies and digital currencies such as *Bitcoin* and Central Bank Digital Currencies (CBDCs)²⁵; local currencies; barter currencies; and some want to bring back gold and silver as money. There is the *sovereign money* movement that wants to take away money creation powers from the commercial banks and hand it entirely to central banks or national treasuries, with full control of the process in the hands of the national government. Then there is the *Modern Monetary Theory* movement that claims that governments can create as much money as they need to finance any project they desire without worrying about debts because they can always print more money to pay those debts.

This growing money creation movement was given a huge boost in 2008 when, in response to the banking crises that took place starting in 2007 in several nations, central banks created tens of \$Trillions from thin air to bail out banks and large corporations.

Once people saw that the central banks could create massive amounts of money at will, much of the mystery about money creation disappeared. Prior to 2008, the money creation process was shrouded in mystery for almost everyone, and there was an assumption that money creation was based on scientific principles and subject to strict limits. After 2008, many saw that gargantuan quantities of money could be created from thin air by the authorities and that this gave those authorities a *lot* of power in our world. Many people started to realize that they too could create money from thin air; however, getting people to use their creation as money is another matter since governments do a great deal to make sure that people *must* use the national currency, as described in *Chapter 25: Why do people use their national currency as money?*

²⁵ I prefer calling them Central Bank *Disappearing* Currencies, but central banks seem unlikely to follow my lead on this. 😊

Chapter 12: Reader's Choice

The last thing I want to do is burden readers with details they don't want, which is why so many topics have been placed in appendices for those interested in more details. A few find [Facts 1 through 3](#) easy to understand, but for most, it can be a struggle. *Illusions* can easily get in the way. So here are some alternative approaches to going forward:

1. If you understand [Facts 1-3](#), please proceed to *Part 2: Consequences of the Debt Standard*.
2. If you are hazy about [Facts 1-3](#), another read should help. For all of us, it takes effort to overcome illusions we've been *fed* all our lives. If you are more visually oriented, you might wish to spend a little time at a site such as PositiveMoney.org²⁶, where they have short videos about how our money gets created. Or you could read the excellent book [Where Does Money Come From?](#) (2014) by Ryan-Collins, Greenham, Werner, et al.
3. If you have objections to [Facts 1-3](#), you may find treatment for your objection(s) in the following appendices.

Objections already mentioned above:

Appendix A: Illusion—“All of our money is created by the government (or its central bank)”

Appendix B: Illusion—“Banks don't create money, they are intermediaries between savers and borrowers”

Appendix C: Illusion—“Money is created by the money multiplier effect”

Appendix D: Illusion—“My money is not debt”

Appendix F: Illusion—“The idea that money is destroyed when bank loans are repaid is wrong”

Other objections

Appendix E: Illusion—“I am debt free, so none of this debt stuff applies to me”

Appendix G: Illusion—“It can't be that banks create money; if they could, they could never collapse”

Appendix H: Illusion—“You are not taking Modern Monetary Theory into account”

²⁶ I don't agree at all with the policy prescriptions at PositiveMoney.org, but their descriptions of modern money creation are accurate.

Part 2:

Consequences of the Debt Standard

Why is it so important that people understand the sources and nature of the money we use every day? Because there are inevitable devastating consequences that proceed from the way our money is created. Worse still, it becomes clear that these impacts are not accidents. They are from our money system operating as designed.

As we look at these consequences, it becomes clear that the Debt Standard is a world of illusions.

(Understanding the information in *Chapter 7: The nature of our money and its main source* is necessary for many of the statements that follow to make sense.)

Chapter 13: Theft of fair play: There is no level playing field, which guarantees conflict

We often hear the concept of the economic *level playing field*, but it is an illusion. We sometimes hear that some new law has been proposed that will “restore the level playing field.” The assumption is that the level playing field exists, but is slightly tilted, and needs a tweak or two to restore it to level.

However, when one group, the bank cartel, can create money from nothing, and everyone else has to **work** for money, the idea that there is an economic level playing field is absurd.

The claim that there is a level playing field is a cover story, propaganda, what people who are more polite than me call a narrative. One group gets to create money and the rest of us have to work for it. How is that *level*? If it is, it requires a new definition of the word.



When one group, the bank cartel, gets to create money, and the rest of us must work for money, there is no “level playing field.”

The table is horribly tilted.

Many people know that the playing field is not level, but they “can’t put their finger on” exactly how that works. If you understand [Facts 1-3](#), now you can see the foundational mechanism.

This simple understanding has deep implications:

- How many people struggling with money have heard this “level playing field” claim and feel it is strictly *their fault* that they have such struggles with money? Unfairly

blaming oneself can be hazardous to one's mental, emotional—and if it prevails long enough—physical health. This is theft of self-esteem, and potentially theft of health.

- It's difficult to overestimate the importance of this: With a tilted table, people get the wrong idea about how life works. And surely understanding how life works is beyond crucial for all of us. People are told that if they work hard and smart, they will reap excellent benefits. But when the table is tilted, many people work very hard and very smart, but someone else reaps the benefits. People end up with a distorted and potentially depressing view of both their own capabilities and how life works—or perhaps a better way to put it is: how life seems to not work, how “life is unfair,” which it is not. “Life” does not create unfairness, some people do.

...when the table is tilted,
many people work very hard
and very smart, but someone
else reaps the benefits.

How will people react when they find out that the claim about the level playing field is a blatant and far-reaching deception?

It's the law!

And since, by law, banks can create money via lending while individuals and non-bank businesses cannot, then one can say that: *By law, there is no level playing field.*²⁷

And what about “free markets”?

We're also told that, in most countries, we have free markets. But don't free markets require an economic playing field that actually is level? Oh well, there goes another idea (free markets) claimed to be a pillar of our economic system!

...don't free markets require
an economic playing field
that actually is level?

²⁷ Some intelligent commentators say that most businesses create credit (for example, “Buy now, pay later!” or “This invoice is due in 30 days.”) so, just like banks, they all create credit. But banks get to create credit that is the circulating medium of exchange, with the government's stamp of approval and backing. Other businesses cannot do this. The credit created by businesses that are *not* banks doesn't circulate among the population; it is giving one specific party *time* to pay. And when that party pays up, what must they use to pay? Money created by banks! These commentators say the same about people: that just like a bank, they create credit when they lend someone money or tools. But people have to *have* the money or tools to lend, they can't create it from nothing and then lend it as a bank can. The privilege that banks have is unique and powerful.

Guaranteed conflict

This lack of a level playing field is guaranteed to be a source of *perpetual conflict*. One small group gets to create money and everyone else has to work for it, borrow it, invest and trade for it (often against very-well-funded competition from the banks), or steal it. Conflict creates *struggle* to win, *fear* of loss, and thus *suffering*, so this embedded conflict creation has significant personal and societal impacts.

It's clear why the banking establishment does not want people to understand how money creation works, that they hope everyone keeps falling for the idea that "money comes from the government."

The great monopoly in this country is the monopoly of big credits. So long as that exists, our old variety and freedom and individual energy of development are out of the question. A great industrial nation is controlled by its system of credit. Our system of credit is privately concentrated. The growth of the nation, therefore, and all our activities are in the hands of a few men who, even if their action be honest and intended for the public interest, are necessarily concentrated upon the great undertakings in which their own money is involved and who necessarily, by very reason of their own limitations, chill and check and destroy genuine economic freedom. This is the greatest question of all, and to this statesmen must address themselves with an earnest determination to serve the long future and the true liberties of men.

—Woodrow Wilson (1856-1924), Democratic Party, US President 1913-1921, *The New Freedom*, 1912

* * *

This lack of a level playing field prevails not just among individuals, but among countries as well.

Chapter 14: Money flows most easily, automatically, to the banking sector

When a banker, in addition to his other functions, is also an issuer of paper money, he gains an advantage... the banker by issuing it levies a tax on every person who has money in his hands or due to him. **He thus appropriates to himself a portion of the capital of other people**, and a portion of their revenue.

—John Stuart Mill, *Essay IV: On Profits, And Interest* in: *Essays on Some Unsettled Questions of Political Economy*, London: John W. Parker, West Strand (1844), pp. 117-118. Citation and bolding from [Wikiquote.org](https://www.wikiquote.org).

What would your life be like if you were one of only five people in your area who could create the money used there? Wouldn't there be a line of people at your door every day, telling you that they needed money to buy a house or a car or a set of tools or food or whatever? And if you could create money from nothing, lend it to people, and then charge interest on that money, wouldn't money flow to you—quite automatically—from everyone else in the community? Wouldn't you be more than likely to end up as one of the richest people in your area?

Well, that is the system we live under, except it isn't you that gets to create the public's money, it's the banks. They get to create the money we use, and charge interest on that creation. This means that, inevitably, money flows easily, automatically, to the banking sector.

Here's an example: Bank of America (BofA), which is the seventh largest commercial bank in the world, collected almost \$14 Billion more in interest payments than they paid out (on savings accounts, certificates of deposit, and so forth) *just in the 3rd Quarter* of 2022.²⁸ That's what the flow of interest payments looks like in our current money system: \$14 Billion to one bank in a single 3-month period! And remember that there are six global banks that are even larger than BofA.

Look at the photo below, and then look around your area and see how much more prosperous—and often dominant—banks look than most other structures in your city or town. Now you know why.

²⁸ MarketWatch.com, [Bank of America beats earnings target as net interest income and revenue rise](https://www.marketwatch.com/story/bank-of-america-beats-earnings-target-as-net-interest-income-and-revenue-rise-2022-10-17), 17-Oct-2022.



The London skyline, showing Citibank, HSBC, Barclay's, and State Street banks.

Political and cultural power

This automatic flow of money gives banks a great deal of influence over politicians in search of campaign contributions.

And the banks get to approve who gets bank loans and who does not, giving them great influence on our culture as they make decisions about what gets funded and what does not.

Chapter 15: We don't own money, we rent it from the bank cartel

We pay to *RENT* money from the bank cartel. That cartel has the monopoly on money creation. Recall from [Fact 2](#) that when you make a deposit in a bank, by law, the bank owns the money, not you. They owe you the amount you deposited.

We pay to *RENT* money
from the bank cartel.

In every use of a check, credit card, debit card, wire transfer, *PayPal*, *ApplePay*, *AliPay*, *WhateverPay*, the money involved never leaves the banking network. It moves from one bank to another, or between accounts at a single bank if the payer and receiver both use the same bank.

So banks create money via loans, and then they hold it captive in the banking system! They allow us to use it to trigger transactions, but that money never leaves the banking system.²⁹

Think about what happens in financial transactions:

- *Checks*: If I write you a check, and you deposit that check in your bank, money will move from my *bank* account to your *bank* account.
- *Debit cards*: If I use my debit card at a shop, money moves from my *bank* account to the *bank* account of the shop.
- *Credit cards*: If I use a credit card for a purchase from a vendor, my bank grants me a loan by creating money that then moves from my *bank* to the vendor's *bank* account.
- *Payment services*: Lots of named payment services are emerging: *GooglePay*, *Square*, *Stripe*, and so forth. These services may offer conveniences for their users, but they don't alter the fact that the underlying transaction is money moving from one *bank* account to another.

There are minor exceptions:

- The relatively small and dwindling use of paper currency: If I hand you a paper Dollar, that can be an independent, private transaction between you and me with no *direct* bank involvement.
- Transactions entirely in alternative currencies: barter currencies, complementary currencies, cryptocurrencies, and so forth. Note well that their share of transactions versus national currencies is miniscule, and that the users of those alternatives almost invariably define the "value" of their alternative currency as a price in a *national* currency, that is, bank credits.

With financial transactions in today's world, these exceptions are about as far as independence and privacy extend. The main reason is that the authorities intentionally make it very difficult, if not impossible, to use alternative currencies. How they do so is explained in detail in *Chapter 25: Why do people use their national currency as money?*

²⁹ Some argue that money leaves bank accounts to go into the national government account as taxes, but that national government account is held at the central bank.

And someone is paying interest (rent) on almost all of that money captured in the banking system.

Again, how is that a free market?

It is worth noting that this is a cartel, a monopoly, right at the center of an economic system claiming to be a free market, that is, the bank cartel has a monopoly on money creation and movement. Many countries have laws against monopolies and cartels, as explained in *Book 2*, but the bank cartel has always been exempted from being correctly designated as such.

National laws against monopolies exist because monopolies always seek to increase their power and wealth. Always. They want ever-more power over others. The bank cartel's behavior fits the bill perfectly: It has been increasing its power over people for at least a hundred years, and the case easily be made for over 500 years.

Some will claim it's not a cartel/monopoly because "anyone can start a bank." They shouldn't bring up this topic, because if one understands how a bank is created, it reveals the debt-based circularity of our money system. *Appendix O: A circular system* shows that starting a bank reveals the circular nature of our money system: debt backs debt which backs debt which backs debt ... in an endless circle.

Rest Stop 3

Whew! I know, I know, it's a lot to take in! If you need it, take a break. If you are lucky enough to have a garden, go harvest some of those fabulous organics you've been growing.



(Photos by the author, harvests from the household garden.)

Chapter 16: When money is debt, the supply of it must always grow

Many of us lament accelerating wealth inequality, our societal addiction to financialized growth, the sale of our democracy to the highest bidders, and so forth. Very few see the strong link between those and a simple but monumental “feature” of debt-based money:

The supply of it must always grow.

This principle is crucial not just to understanding our money system, but to understanding modern society.

I said it is simple, and so it is:

A bank loan for \$10,000 creates the \$10,000. If the loan is for one year and the interest rate is 5%, then in one year, \$10,500 is due.

So the initial loan created \$10,000. But that \$500 interest payment has to be created by some other loan.

Multiply that by currently outstanding bank loans of hundreds of millions of people and organizations, and combine it with [Fact 3](#)—that paying off a bank loan destroys money—and you realize that there needs to be constant *growth of new loans* to pay existing loans plus interest. The amount due is ever larger, so there always has to be growth in the amount being loaned. *Somebody* has to borrow more money. And more money. And more money.

This was expressed well in a remarkable video by Damon Vrabel, showing that the math on this is very simple:

Our economic model is built upon fundamentally unstable math:

$$P < P + I$$

P is all the money in the economy at any given time (Principal). *I* is the Interest that compounds on top of *P* that must be paid back. So the economy is constantly **running faster and faster** to generate more *P* in order to payback *P+I*. That creates perpetual exponential growth ... and deeper servitude over time.

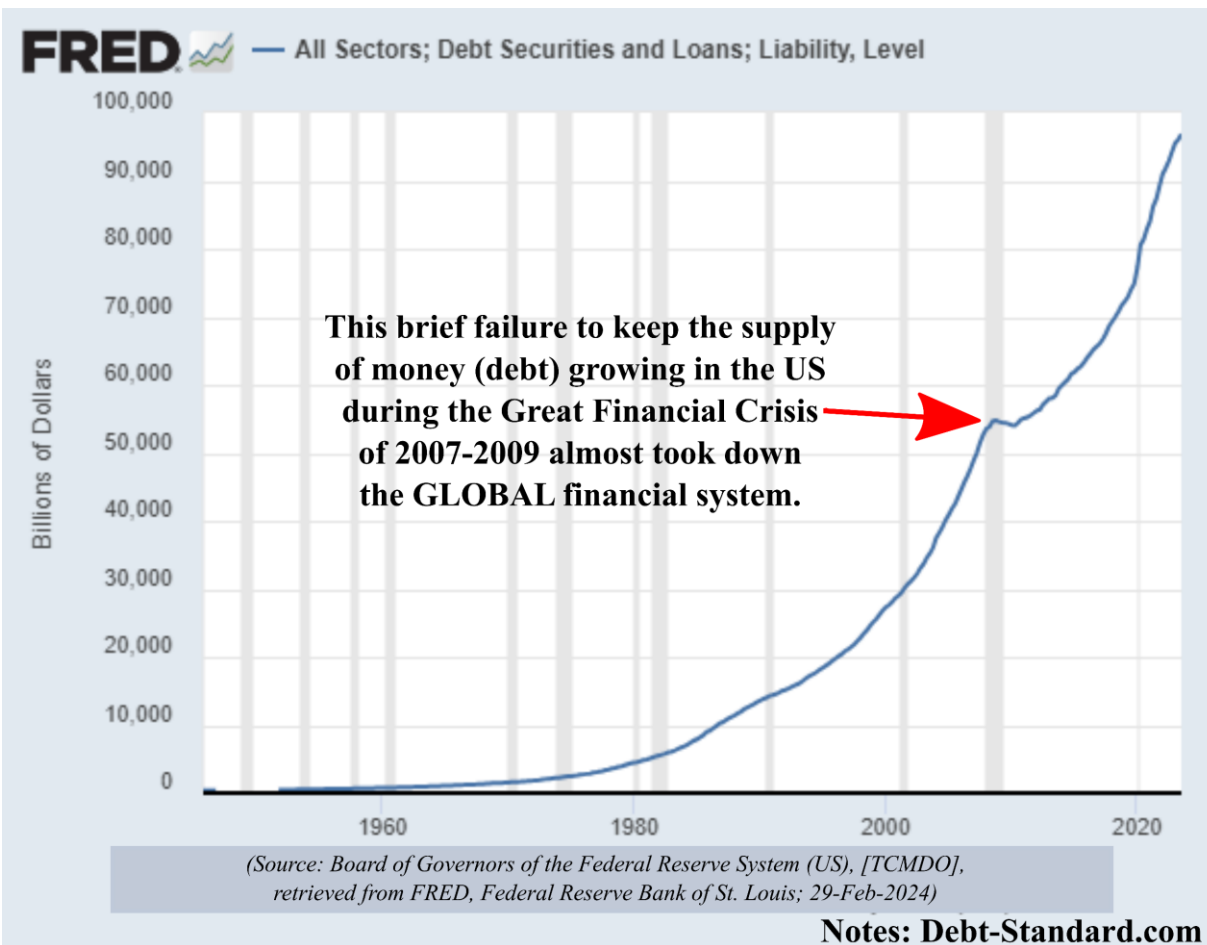
—*Renaissance 2.0 - Financial Empire*, 2012

What happens if there isn't enough money being created to pay the existing loans plus interest? Obviously, some of the loans can't be repaid because there isn't enough money to repay them all. This starts a chain reaction. Banks—needed in our current system to create new money/debt—see that some people aren't repaying their loans, and they fear *they* won't be repaid, so the banks “get prudent” and start making fewer loans. This means there's even *less* money around to repay existing loans plus interest. Which means even more people won't be able to repay their loans. Some people reduce their spending to try to keep up with their loan payments. The reduced spending means some businesses can't repay *their* loans, so they lay people off, and then the people who get laid off can't repay *their* loans. So the system starts going in reverse: instead of ever-increasing loans to cover the ever-increasing

debt burden, now there are fewer and fewer new loans, which mean more and more existing loans can't be repaid. You get—depending on how far things go—what people call a recession, a depression, or a banking system collapse.

So under the Debt Standard, debt must always grow or the money system gets seriously unstable very quickly.

Want evidence? Here's a chart of the amount of debt in the US starting in 1945. Debt grew by 250-fold (*far* faster than the real economy) from 1946 (\$357 Billion) to early 2024 (\$97 Trillion). Years are along the bottom of the chart; the level of debt is shown on the left:



The arrow points to the brief period of time during the Great Financial Crisis of 2007-2009 when the amount of debt actually declined slightly for just over a year. Recall that this not only came close to taking down the US financial system, but the *global* financial system as well. Central banks printed \$Trillions in new money (debt) to bail out the big banks and corporations while millions of homebuyers lost their homes to foreclosure. They created those new \$Trillions to get the curve in the chart above climbing again. They understand that it must climb.

Oddly, authorities never speak publicly about this powerful dynamic: that debt must always grow, that there is no choice about it when the money itself is debt. Instead, people, businesses, governments are chided that they borrow too much, that they have allowed

themselves to become debt slaves. But *somebody* has to be the one who borrows “too much.” In fact, a lot of somebodies. Or the entire money system goes into reverse and could easily collapse.

So we have discovered another inviolable rule of the Debt Standard: **The supply of debt-based money must always grow.**

A corollary is: If a lot of somebodies become prudent and start paying down their debts, the economy shrinks and money system becomes unstable.

Now you can understand why the authorities chant “Growth, growth, growth...” like it’s some magical incantation. And why they go to great lengths to induce people to borrow more money. And if people aren’t willing or able to borrow more money, the authorities will come up with new tricks and programs to *create* more debt!

Now that we understand this principle plus [*Facts 1-3*](#), we can really be “off to the races” in cataloging the devastating effects the Debt Standard.

Chapter 17: Theft of choice: A crushing burden of debt

...interest is an invention of Satan.

—Thomas Edison, famous inventor, in the [NY Times, 6-Dec-1921](#)

When debt must always grow, it becomes a crushing burden on society. How much debt is there in the world? In late 2023, it's about \$313 Trillion according to the [IIF](#).

It's beyond difficult to comprehend how large \$313 Trillion is. Consider this: Funding the massive US military (with over three million active and reserve soldiers, civilian employees, and contractors; 867 bases³⁰ in 80 countries—the largest base covers 500 square miles; 27 million acres of land in 45 countries with buildings valued at \$749 Billion;³¹ ten aircraft carrier strike groups—each with perhaps twelve ships; 5,000 nuclear weapons; nearly countless aircraft, tanks, troop carriers, multiple spy agencies, and pensions and medical coverage for ex-military people) costs about \$1 Trillion per year. Three hundred times that is a humongous amount of debt.



One of the ten US aircraft carrier strike groups. (Source: Wikimedia Commons.)

And how much interest do we pay on all that debt?³² We have to guess because the data is not available—at least not to the public. If we guess that the average interest rate is 4% (this is generous, it's likely higher), then the equivalent of US\$13 Trillion gets paid in interest each year. If it's 5%, that's \$16 Trillion in interest due. That \$13 to \$16 Trillion does not include repayment of the amounts borrowed—it's just the interest tacked on top of the unpaid loan amounts.

Are you starting to get the idea of just how big this debt repayment business is?

³⁰ *AntiWar.com*, [See 867 Military Bases on New Online Tool](#), 15-Nov-2022

³¹ *VisualCapitalist.com*, [How Much Land does the U.S. Military Control in Each State?](#), 27-Jul-2022.

³² It turns out that it's more than difficult to find out. An organization like the central bank of the US, the Federal Reserve, has over 822,000 different data series on its web site! If you need it, you can find out esoterica such as the price of propane every day since 1992 at Mont Belvieu, Texas. But they don't have a data series on, for example, how much interest is paid by US citizens as a group. (I emailed them and they confirmed this.) Is it too complex to figure out? Or would they rather we didn't know?

Just the interest is *four to five times what the world pays for oil each year*. (The world pays roughly US\$3 Trillion per year for Oil at current oil prices and rates of consumption—99 million barrels per day at US\$80 per barrel.)

This means that, roughly, for every eight dollars spent in the world *on all goods and services* (food, shelter, energy, transportation, health care, recreation, utilities, and so forth), one dollar in interest gets paid!

Let's guess that 10% of the principal—that is, that \$313 Trillion that was borrowed—must be paid back each year.³³ So that's \$31 Trillion in debt repayments added to the \$13 Trillion in interest, and the global economy is estimated to be \$100 Trillion for 2023. So \$44 Trillion must be sent in for debt repayments in a \$100 Trillion economy. That is a *very* large chunk of money, and a *very* large burden on our society.

Can we get any verification that the numbers above are reasonable estimates? Yes, one study³⁴ about debt and interest payments in China—which has grown debt in unprecedented and reckless fashion in recent decades, including to build enough empty condominiums to house the population of New York City *27 times over*—says it is likely that China will soon be paying 18% of the size of its economy in interest payments. That means they will be paying one Yuan in interest for every 4½ Yuan in spending on *everything else* in the economy!

Another study says it's much worse than that in China. The study³⁵ has great credibility because it comes from a professor at the business school of Peking University with strong contacts inside the Chinese central bank. (He was fired for publishing the report with the following data.) The report said that China's overall debt, including all sectors, was US\$116 Trillion, or more than *eight times* the size of the annual Chinese economy. If the interest rate on that debt averaged 3.5%, the Chinese are paying 29% of the size of the entire economy in interest. That means for every 3½ Yuan spent in the Chinese economy on everything else, one Yuan in interest needs to be paid. How's that for "communism"! Karl Marx wouldn't just turn over in his grave, he would have a stroke while doing the Triple Lindy!³⁶

That means for every 3½ Yuan spent in the Chinese economy on everything else, one Yuan in interest needs to be paid. How's that for "communism"!

Anyone struggling at all to make those debt payments is likely to curtail spending in other areas, slowing the economy. The spending into the economy from that borrowed \$313 Trillion has already happened, now the paying (the pain?) remains. Now you understand why the authorities were trying to push interest rates to 0% or below; they were trying to make new borrowing for new spending *free* to try to boost economic growth, which is seriously constrained by debt repayments.

³³ This is likely a very generous estimate, it is probable that far more than 10% of the principal is due each year. But again, the data on this is not available, at least not publicly.

³⁴ [zerohedge.com, A Record 18% Of China's GDP Goes To Debt Service](#)
31-Jul-2018

³⁵ James Dale Davison, [China Builds 27 Empty New York Cities](#) 23-Jan-2022

³⁶ From the movie *Back to School* (1986), the [Triple Lindy excerpt](#) on [youtube.com](#).

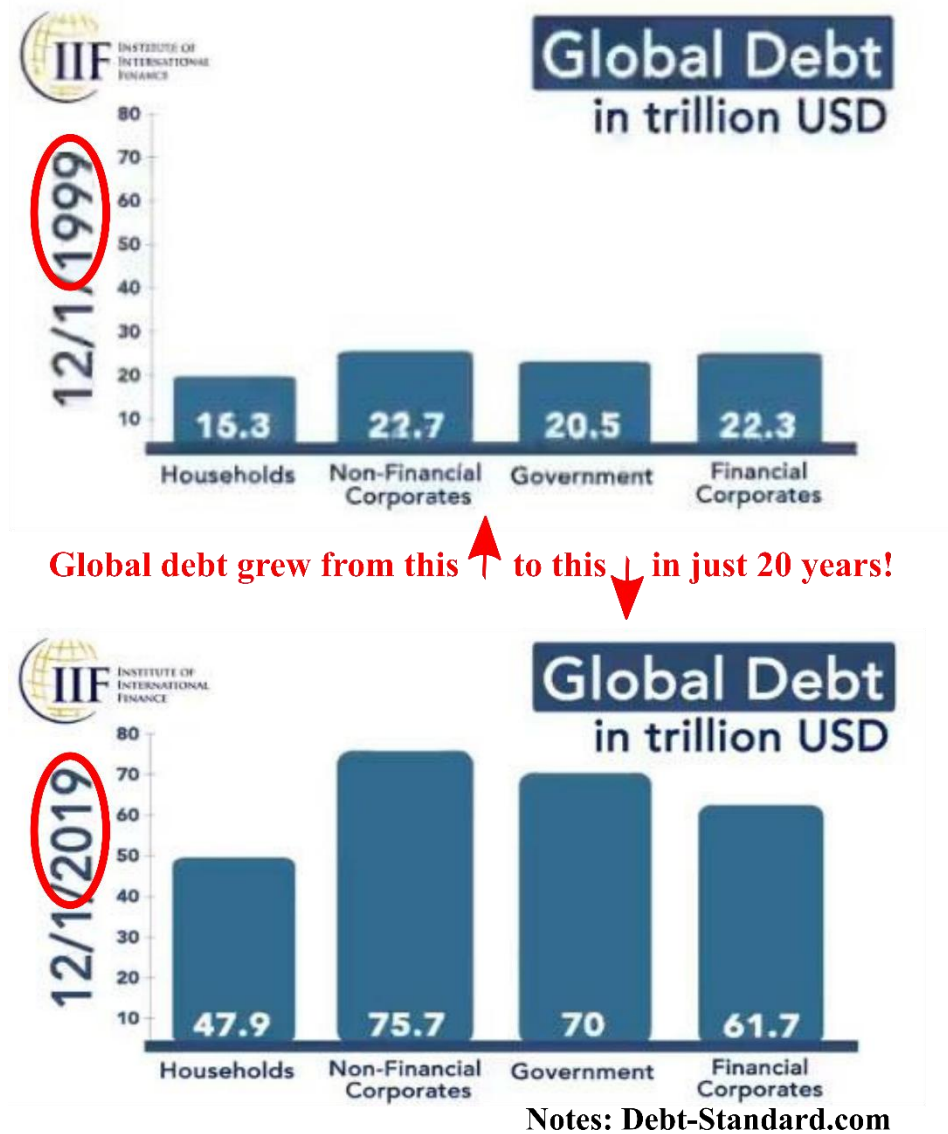


1912 cartoon by Alfred Owen Crozier from his book opposing
“*Corporation Currency*,” that is, money created by banks.
(Source: [U.S. Money vs. Corporation Currency](#), 1912)

This massive debt burden is the *inevitable* result when money is debt. And if the Debt Standard is maintained, the problem is mathematically guaranteed to get worse because, as we have seen, more growth of debt requires more debt to repay it.

In 2000, total global debt, built up since the beginning of recorded history, was about US\$80 Trillion. Since then, in just twenty-three years, the world added that much debt again three times. In other words, the growth of debt is *accelerating*.

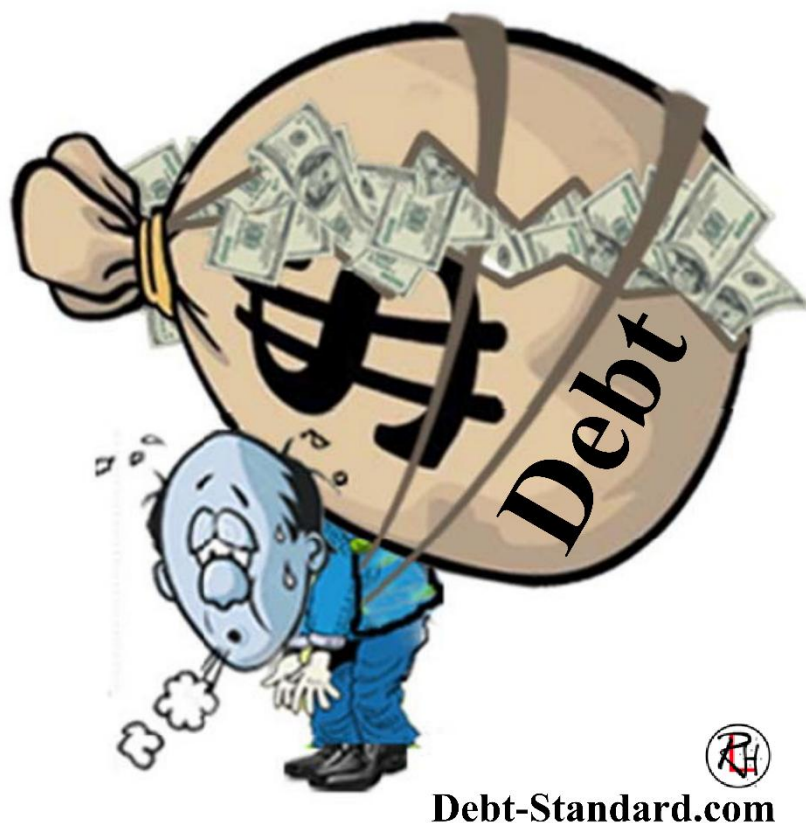
Want to see what that looks like in charts? These two charts show global debt divided into four groups. The first is from 1999, the second from 2019 (before the massive borrowing that took place connected with the pandemic), so it shows how much debt grew in 20 years:



Leading to headlines like this, even from such *status quo* institutions such as the World Bank:

[World Bank Warns "Wave Of Debt" Could Unleash Historic Crisis, Crush The Global Economy.](#)

Obviously, repaying expanding debt is supposed to be enabled by an expanding economy. But here's the problem: According to the World Bank (this was before the Big Virus hit), the world has been adding about \$3 Trillion per year to global GDP. However, the world has been adding about *\$10 Trillion* per year in debt. Does this sound even remotely sustainable to you? Growing debt more than three times faster than the economy is guaranteed to overwhelm the system. So from now on, if anyone tells you that we will have this current money system for the foreseeable future, you will know that they are dead wrong. This system cannot be sustained.

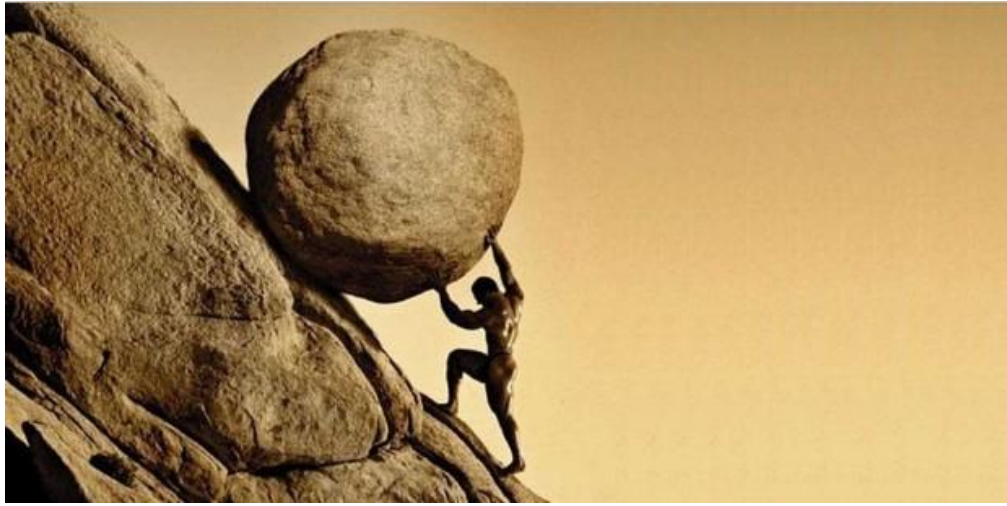


Interest is everywhere, paid by everyone

If you think all this debt does not apply to you, please see *Appendix E: Illusion*—"I am debt free, so none of this debt stuff applies to me".

Debt, grinding debt, whose iron face the widow, the orphan, and the sons of genius fear and hate;—debt, which consumes so much time, which so cripples and disheartens a great spirit with cares that seem so base, is a preceptor whose lessons cannot be forgone, and is needed most by those who suffer from it most.

—Ralph Waldo Emerson, *Nature*, 1836



(Source: *Greek Myth Fandom*, [Sisyphus](#)) Humankind has it tougher than Sisyphus because the debt stone keeps getting larger.

Does this mean I am entirely against all debt? Many have been, especially in the world's wisdom traditions, as we'll document in the chapter *What to do about debt* in *Book 2*. Here is a sample from that chapter, from the ancient Vedas of India:

A Brâhmana ... shall not lend anything at interest... He who acquiring property cheap, gives it for a high price, is called a usurer and blamed among those who recite the Veda'...God weighed in the scales the crime of killing a learned Brâhmana against the crime of charging interest; the slayer of the Brâhmana remained at the top, the charger of interest sank downwards.

—*Vasishtha, The Sacred Laws of the Aryas*, Part II, Chap. 2, verses 40-42

The early Vedas claimed that those who charged interest were worse than murderers! This is just one example of just how negative about charging interest and speculating the wisdom traditions have been.

Still, no, I am not against all debt. Even if one passed laws prohibiting it, people would still lend to one another, including lending money. Debt is like most powerful tools: It can be used well or poorly. In our world at this time, a great deal of it is being used very poorly indeed. But under the Debt Standard, we really don't have a lot of choice about that.

Chapter 18: Accelerating wealth inequality by design (The money harvesting machine)

The gulf between rich and poor which divides the Family of Man ... encourages the ambitions of those who desire to dominate the world, which threatens the peace and freedom of us all.

—US Pres. John F. Kennedy, Remarks before the Protestant Council, NY, 8-Nov-1963

Question: What is the real basis for accelerating wealth inequality?

There are economists—even famous ones who were awarded the non-existent “Nobel Prize in Economics”³⁷—who put forth this illusion: “Debt doesn’t matter. We owe it to ourselves.”

Such a claim is dangerous delusion because there is a *massive imbalance in who owes and who is owed across the population*. *Massive* hardly begins to describe it. It changes the meaning of Winston Churchill’s quote from 20-Aug-1940 in a very unfortunate way:

Never was so much owed by so many to so few.

As stated above, despite the blizzard of economic statistics that are collected, it’s likely impossible to tell how much interest we pay. A German economist, Helmut Creutz, tried to find out how much interest households paid and collected. He was granted access to German government tax data for 2007. He tracked both overt and hidden (buried in utility bills, and so forth) interest payments. He found that €478 Billion (Euros) in interest payments exchanged hands that year in Germany, and

that *the people in the lowest eight of ten income brackets in the country were paying €600 million (\$657 million) in interest **per day** to the people in the top income bracket!*

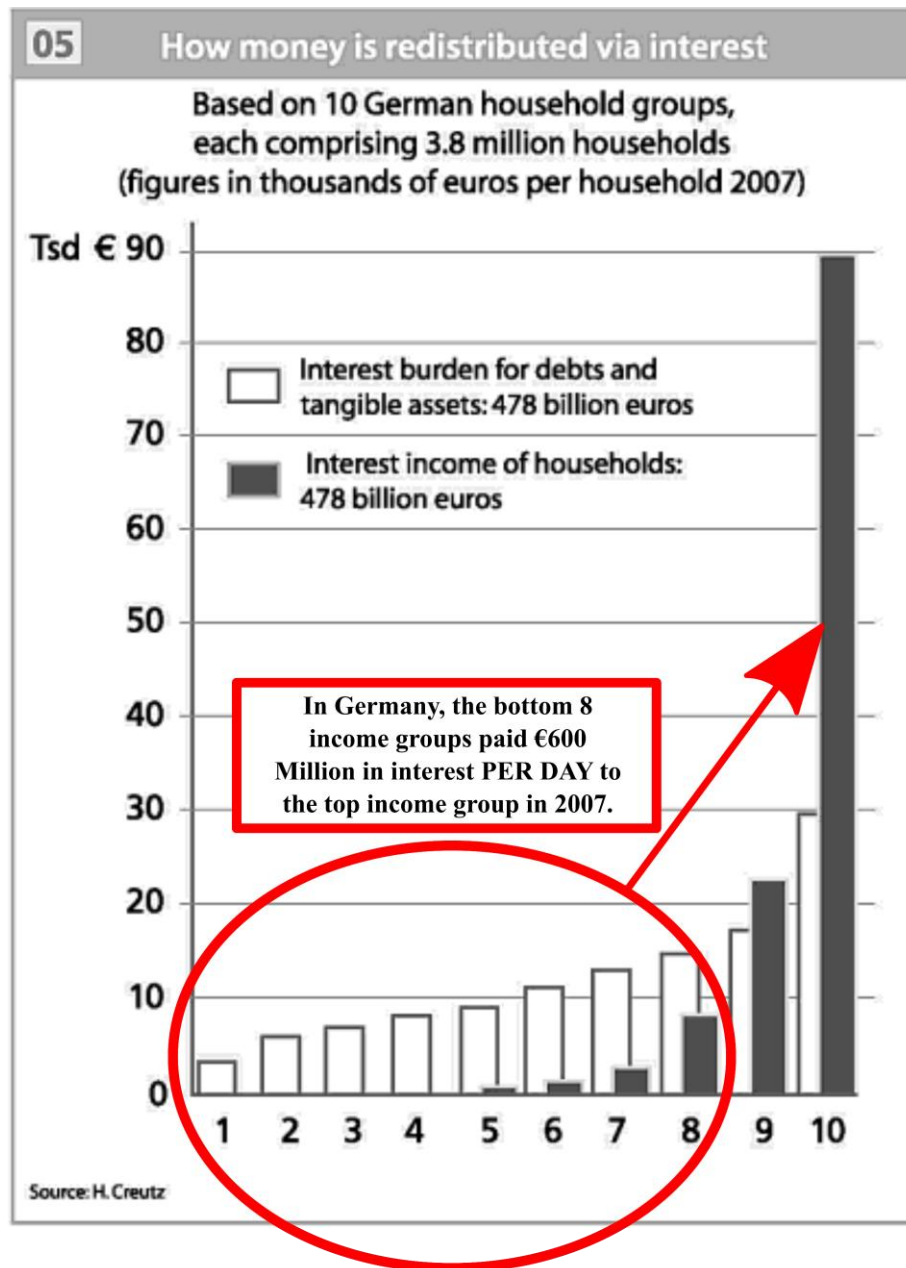
...the people in the lowest eight of ten income brackets were paying €600 million (\$657 million) in interest **per day** to the people in the top income bracket!

What Creutz found was that the four lowest income brackets paid interest but collected no interest at all. The next four brackets up collected a little bit of interest, but paid out more than they collected. So that lowest-income 80% of the population primarily *owe*.

The ninth income bracket did slightly better than breaking even, that is, they collected just a little more interest than they paid out. The tenth bracket, the so-called “top 10%,” the upper 10% of income earners, collected *a lot* more interest than they paid out. That tenth bracket is primarily *owed*.

³⁷ So typical of the field of economics, it is an illusion that there is a “Nobel Prize in Economics.” See *Appendix R: There is no “Nobel Prize in Economics”*.

Here's what this looks like on a chart. The white bars are the level of interest payments in Euros for each group. The black bars are interest collected.



Notes: Debt-Standard.com

(Source: Data and chart from Margrit Kennedy, *Occupy Money*, P. 25. Creutz' calculations are described in his book, *The Money Syndrome*.)

You can visualize this €600 million *per day* being paid to the top income bracket it on the chart by summing up the white bars (interest paid) for the lowest eight income groups, which convert to the very large black bar (interest collected) for the top income bracket.

When 80% of the population in one country is paying €600 million *per day* to 10% of the population, life is more than likely to be financially challenging for that 80% of the population doing the paying! And rather posh, moneywise at least, for that top bracket. But wait! It gets worse. Not only does the top bracket collect the big flows of interest, but that continuous money flow propels their purchasing of stocks, businesses, real estate, and so forth.

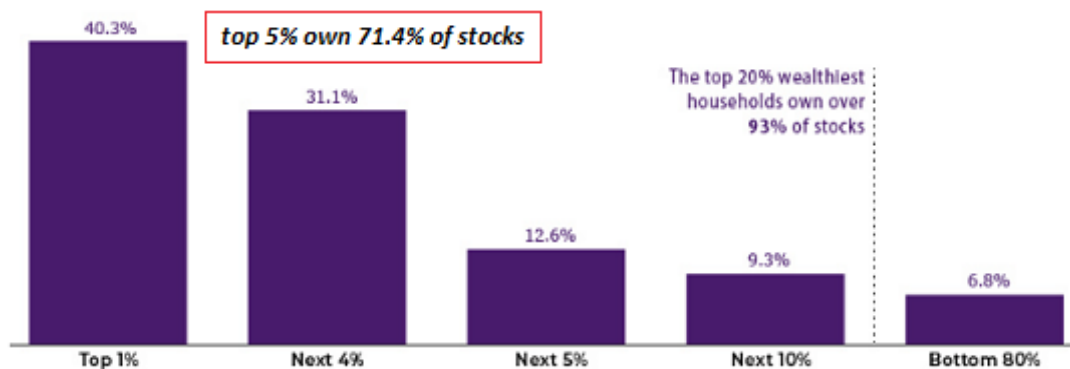
Stock ownership further propels the inequality

In the US, the top 10% wealthiest households own 84% of all US stocks. The top 20% of the wealthiest own more than 93% of all US stocks. The 80% of the population with the least wealth owns less than 7% of all US stocks.

Extrapolating from Germany to the world

The German economy is 4.6% of the world economy. So if the rest of the world has roughly the same money setup as the Germans, then that €600 million per day flowing from the lower brackets to the higher in Germany would be about €13 Billion a day if the whole world is taken into account. That's **€4.8 Trillion per year (\$5.7 Trillion in US Dollars)**! So that's 80% of the population of the world paying **\$5.7 Trillion** per year to the top 10% in interest payments alone.

CONCENTRATION OF STOCK OWNERSHIP BY WEALTH BRACKET



source: www.visualcapitalist.com

(Source: VisualCapitalist.com, [How the Composition of Wealth Differs, from the Middle Class to the Top 1%](#), 8-May-2019)

This means that those in the lower eight income brackets buy products from the companies owned by those in the top bracket, with the dividends and capital gains from those sales going to the owners, that is, the top bracket.

Real estate accelerates it even further

The top 10% of the wealthiest households in the US own 82% of the non-home real estate in the country.³⁸

³⁸ *Washington Post*, American land barons: 100 wealthy families now own nearly as much land as that of New England, 21-Dec-2017

This means that many of those in the lower income brackets pay *rent* to the top bracket, leading to larger bank accounts for the top bracket, allowing them to buy even more assets, and on and on the process goes, super-charging income and wealth inequality. If we keep this money system, this is guaranteed (there's that word again!) to get worse with time.

The primary source of wealth inequality

Look no further for the primary driver of income inequality: it's debt-based money and the automatic flows of interest that it creates. The numbers above are based on 2007 statistics, and wealth inequality has continued to accelerate.

Some believe we can remedy wealth inequality with a steeply progressive tax system, but the enormous numbers shown above—and the ownership of assets enabled by that money flow—cast serious doubt on whether any tax system could counter such massive money flows.

And despite so-called *foreign aid* and *foreign development loans*, this phenomenon also applies when comparing richer countries to poorer countries:

We had borrowed around \$5 Billion by 1985 or 1986. To date we have paid back \$16 Billion. Now we are told that we still have \$28 Billion of debt ... because of the interest rates set by the foreign creditors. If you ask me what the worst thing in the world is, then I would say compound interest.

—Nigerian President Obasanjo, G-8 Conference, 2008

If we keep debt-based money at the center of our financial system, this will *always* be the outcome.

A debt-based money system *guarantees* this effect.

It is a giant *money harvesting machine*.

The Debt Standard automatically funnels money to those who have more from those who have less.

It's the *anti-Robin Hood*, taking from the poorer and giving to the richer.

It's the prime mover in soaring wealth inequality. This flow of money is inevitable and relentless in a debt-based money system.

And those economists who swear that they are working to remedy poverty and wealth inequality who say, "Debt doesn't matter, we owe it to ourselves."? They thereby express their full support for the most reliable mechanism we have for assuring wealth inequality: debt-based money.

Look no further for the primary driver of income inequality: it's debt-based money and the automatic flows of interest that it creates.

The Debt Standard automatically funnels money to those who have more from those who have less.

The money system is a redistribution system

Some complain bitterly when government taxes the wealthier to support the poorer, calling it *redistribution* of income and decrying this process as socialism and theft. I will leave the discussion of such topics for *Book 2*. But the complaint deflects notice from the reality that a debt-based money system is designed **from the ground up** to redistribute money from those who have less to those who have more. So our money system itself is, at its very foundation, a redistribution system. This shows yet again that the Debt Standard being a “free market” is myth, not fact.

Debt-based money is not the *sole* cause of wealth inequality. We will see more contributing causes below. What they show is that consequences of using debt-based money create feedback loops, further boosting income inequality. With debt-based money, you can *never ever* solve the wealth inequality problem. It has the mechanical effect of relentlessly *accelerating* wealth inequality, continually making it worse.

We’ve heard people say that our money system is a *Wealth Generation System*. Note that they are almost always members of the smaller group on the receiving end of vast flows of interest, dividends, rents, and so forth. For the far larger group that pays to support those vast money flows, it’s a *Debt Generation System*.

Chapter 19: Theft of freedom: Price inflation

We have to remind ourselves again and again that nothing has made the German people as bitter, hateful, and ready for Hitler as inflation.

—Stefan Zweig, *The World of Yesterday*, 1941

Inflation is a tax and those least able to afford it generally suffer the most.

—Esther George, President, Federal Reserve Bank of Kansas City, May 2017

Question: Why do so many people feel stuck in what they are doing, that they have little or no freedom to change?

Financial slavery

Since this chapter says it's about *theft of freedom*, let's first mention the type everyone has heard of, namely *debt slavery*.

We showed in the preceding chapters that for this money system to continue, it is required that many become “someone who borrows too much,” leading many individuals, businesses, and governments to become debt slaves.

There are two levels of debt slavery. The first is the horrendous forcing of people into labor camps, sweat shops, the sex trade, and so forth that are inescapable due to physical coercion (with promises of freedom once the worker's debt is repaid—though that never happens) or threats of violence to families of the workers.

A reasonable definition of the more numerous and second type of debt slave is someone who needs to keep borrowing ever more just to pay off existing loans plus interest; their debt load keeps expanding. That describes almost every national government on the planet. Thousands of companies (20% of all of them, by most accounts, in the US, the EU, and China) are considered to be “zombie companies,” that is, their interest payments exceed what they earn after expenses; in other words, the debt load of these companies continually expands because they borrow more just to pay interest.

Individuals who end up as debt slaves experience an extraordinary level of stress, threatening their health,³⁹ as they try to face what feels like a hopeless task: extracting themselves from their debt predicament. And if you are struggling to keep up with an overload of debt and taxes, how likely are you to explore a new career, start a new business, go back to school to enhance your skill set, move to another country? No, you feel stuck, no matter how distasteful your current situation, to keep from falling even farther behind—especially if you are supporting a family. You do not feel free.

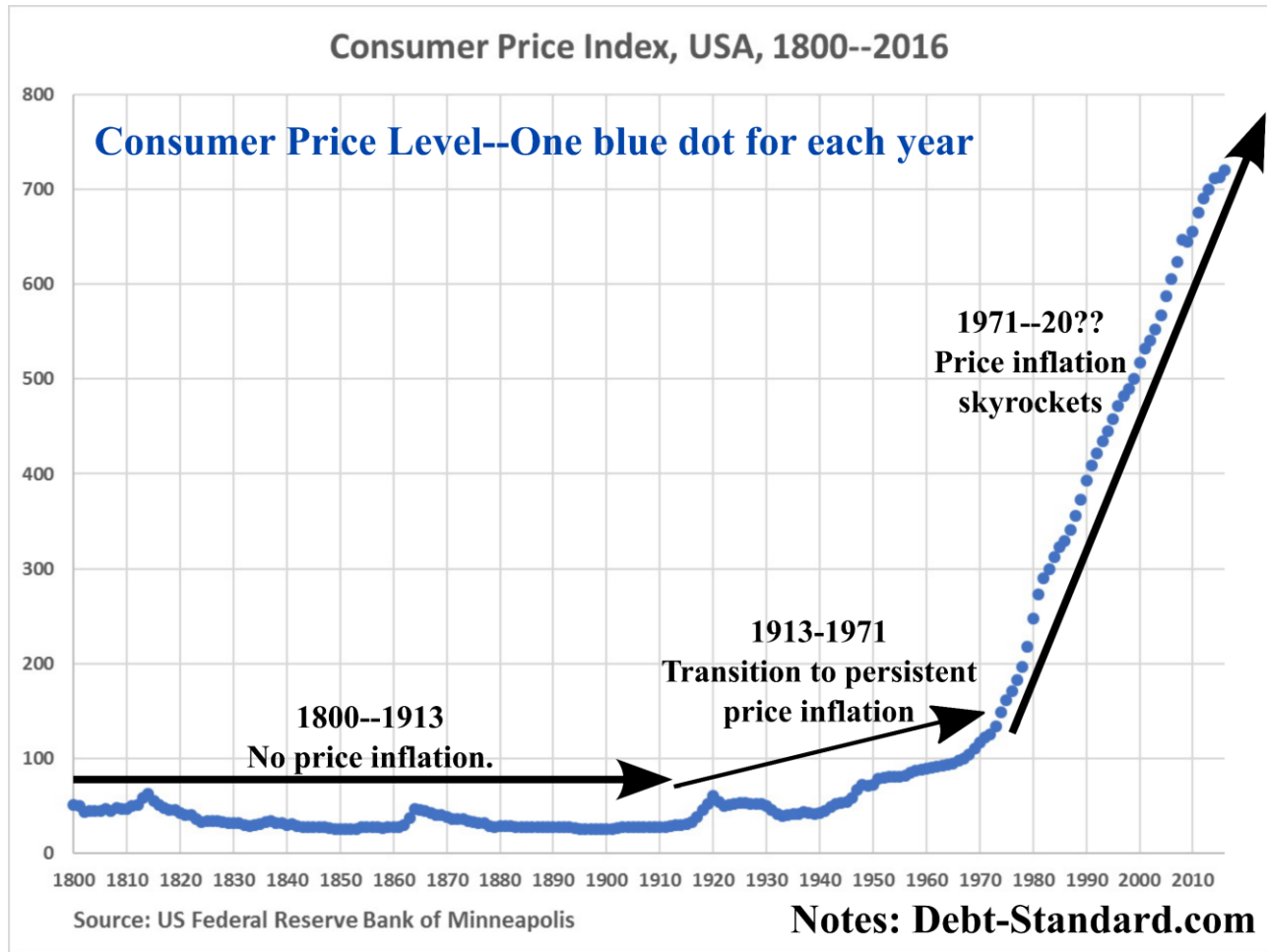
³⁹ *Health.com*, [7 Ways Debt Is Bad for Your Health](#), 8-Nov-2021; and *zerohedge.com*, [Stress Creates A 4-Fold Increase In Spread Of Cancer: Study](#), 29-Mar-2024

Rising Prices

Now we'll talk about how our money system really "puts the nail in the coffin" in terms of struggle, and theft of freedom. This is one of the most devastating money mechanisms described in this book.

*Rising prices are **NOT** inevitable*

First, we need to deal with yet another illusion, this one held by almost everyone in the modern world. We have been conditioned to believe that rising prices are normal, somehow part of the natural order. The fact that this is an illusion is shown in this chart of consumer prices in the US starting in the year 1800 published by the US Federal Reserve (the [data source is here](#); annotations and arrows by the author):



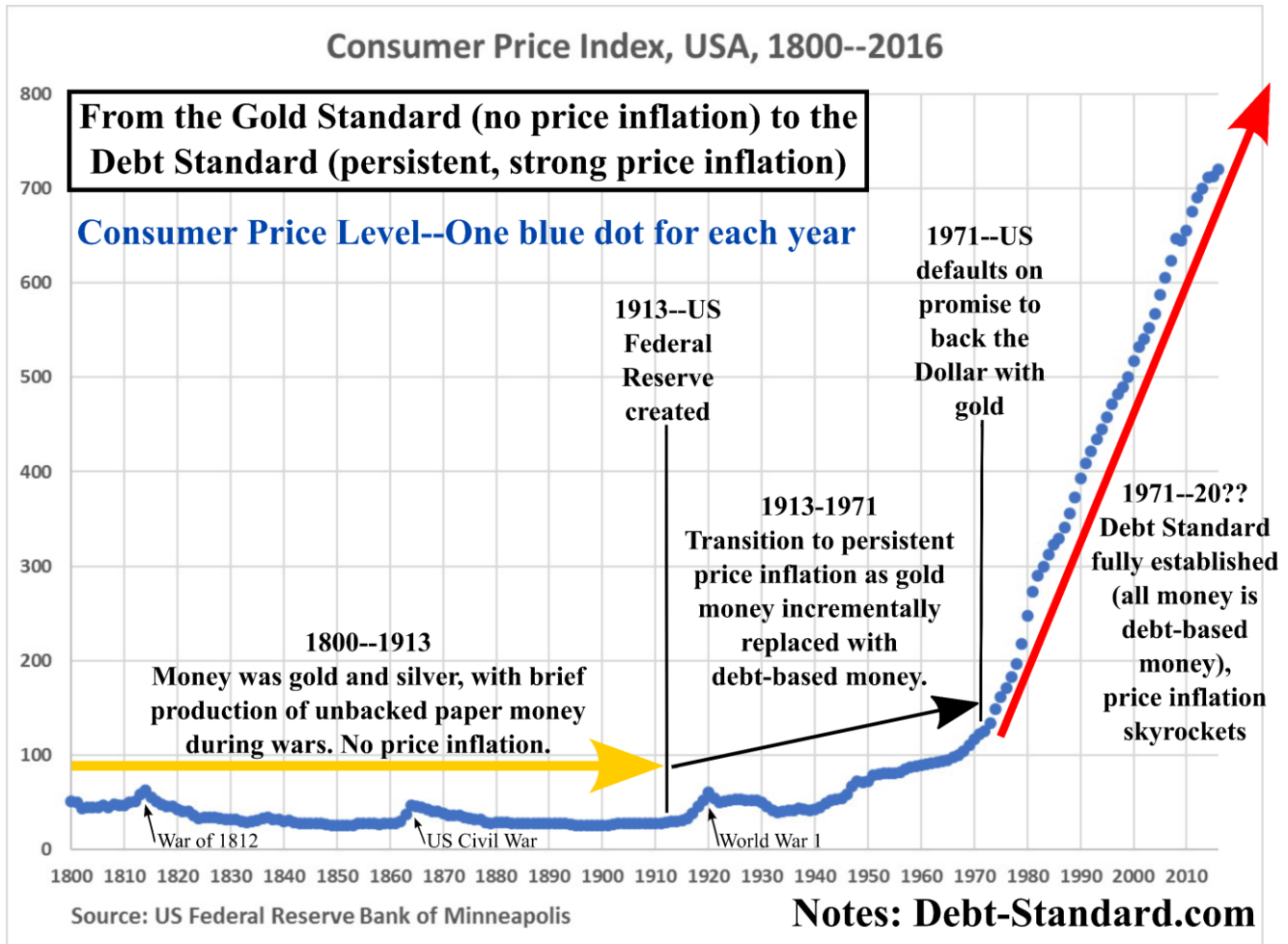
The blue dots show the level of prices for each year in the USA, one dot per year, from 1800 to 2016. The notes and arrows differentiate among three periods:

1800—1913: Note that the blue dots, one for each year, are so close to one another that they form a continuous line. There was no overall consumer price inflation during this period (113 years), in fact, prices slowly fell! Prices spiked up at times, but always fell back to the previous level or slightly lower.

1913—1971: By the end of this period, the blue line is rising in a steady fashion, indicating a transition from slowly falling prices to persistent, moderate price inflation.

1971—20??: Consumer prices begin a persistent strong rise, indicated by the blue dots no longer forming a continuous line. Each dot stands alone as prices are noticeably higher than the preceding year. Such persistently rising prices is what most of us consider normal because it is all we've ever seen.

But it isn't normal, as shown by the flat prices from 1800-1913. So what explains the difference between these periods? The next chart shows what happened:



1800—1913: This corresponded to the time when the US Dollar was gold and silver coin, or was paper redeemable for gold or silver at any bank, a time that people now call the Gold Standard. Economic transactions were real-for-real. Prices were flat to lower for 113 years. Prices spiked up twice, during the War of 1812 and the US Civil War (both marked on the chart), but fell back after those wars. Prices for many items both rose and fell, for example, a poor harvest might spike the price of corn for a year, but overall, prices would fall back to their previous level.

This was a time of tremendous economic growth during which the US transformed from a small, agrarian economy to a global financial power. That “rising tide” didn’t “lift all

boats,”⁴⁰ but it did for many as the general level of prosperity in the country increased manyfold and for many people. But all this economic growth did *not* create higher prices.

1913—1971: This period begins with the creation of the Fed in 1913. Prices spiked up as most countries ignored the Gold Standard during World War 1, creating money from nothing to fight the war. In 1922, the bankers were allowed to start replacing gold and silver in their reserves with US Dollars and British Pounds created by the bankers themselves when they made loans, that is, debt-based money, what we’ve also called here *bank credits* or *corporate currency*. Prices fell during the early 1930s (the Great Depression), during which governments and bankers defaulted on their promise to allow anyone to exchange paper money for gold or silver. As more and more gold money was replaced with bank credits (debt), prices began a persistent climb. Consumer prices rose fourfold, that is, they quadrupled, during this 58-year period.

1971—20??: In 1971, the US broke its promise made to the world in 1944 by ending gold backing for the US Dollar. (US President Nixon claimed that this was temporary!) Gold and silver were no longer considered money. Now commercial banks and the central bank (the Fed) had complete control of money creation. And create they did—and still do. Consumer prices skyrocketed, increasing eight-fold in the last 52-years. On the chart, the blue dots no longer form a solid line.

This period is known here as the Debt Standard. The arrow in red hints at the fact that humankind is putting itself deeply “in the red” because the only way to create more money now is to create more debt. It took the US government 206 years (until 1982) to bring its national debt to \$1 Trillion. As of early 2024, the US government is adding another \$1 Trillion to the national debt every 100 days! So that’s 750 times faster than the US used to add to the national debt. And that number has been accelerating! How do you spell unsustainable?

It took the US government 206 years (until 1982) to bring its national debt to \$1 Trillion. As of early 2024, the US government is adding another \$1 Trillion to the national debt every 100 days!

So now, with historical perspective, you can see that price inflation is not normal or necessary. It is a *feature* of debt-based, banker-created money. It is a feature of the Debt Standard.

So how does price inflation create financial slavery?

The reaction of many people to this is: “What’s the big deal? Prices rise equally for all, and so do incomes.”

⁴⁰ It didn’t “lift the boats” of the two million slaves working in the cotton fields of the US South prior to changes in US law connected with the US Civil War (the Emancipation Proclamation of 1863 and the 13th Amendment to the US Constitution in 1865, which ended slavery). Those slaves enabled US cotton plantation owners to dominate the cotton market by selling cotton at a lower price than other suppliers in the world, and textile mills in the US North were happy to buy that cheaper cotton and sell lower-priced textiles to the world. This was a non-trivial component of the emergence of the US onto the world economic stage; and a horrendous trauma for those enslaved.

However, the impact of price inflation is not “equal for everyone,” not by a long shot. Please consider: If a person earns ₱20,000 (pesos) and their basic necessities cost ₱500, this person can easily handle steadily rising prices. At worst, price increases might annoy them. And chances are excellent that the prices of their assets (real estate, stocks, and so forth) are rising, which pleases them greatly.

However, if a person earns ₱500, and their basic expenses are ₱500 or more, then steadily rising prices make their economic life one of constant struggle. *They often have to choose which necessities to purchase and which to forgo.* I’m not talking here about skipping a latte at their favorite coffee shop, I’m talking about food, proper clothing, heating one’s house during a cold spell, medical treatments, and so forth. When people with no financial surplus encounter an unexpected expense—and who doesn’t—things get really difficult and force the person take on debt, if they can get credit at all. Any such debt makes their overall financial situation worse because now they have to pay interest in addition to already struggling with basic expenses.

So, persistently rising prices—a condition that central banks worked hard to *create* for more than a decade⁴¹—are an incredible difficulty for those with little or no financial surplus. With 6 out of 10 people on the planet living on less than \$10 per day,⁴² the vast majority of people fall into that category of “little or no financial surplus.” This is true of many even in the so-called “rich countries.”⁴³

When food prices rise, it may be annoying to upper and middle income people in the EU and US, but the people of the Philippines, Kazakhstan, and Pakistan spend about 42% of

⁴¹ It’s not surprising that central banks like the Fed think that *creating* price inflation is acceptable when they are managed by people such as the President of the Federal Reserve Bank of San Francisco who makes US\$422,900 per year and said this:

During an interview with Reuters broadcast live on Twitter spaces, Daly said: “I don’t feel the pain of inflation anymore. I see prices rising but I have enough... I sometimes balk at the price of things, but I don’t find myself in a space where I have to make tradeoffs because I have enough, and many Americans have enough.”
—Mary Daly, President, SF Fed, ["I Don't Feel The Pain Of Inflation Anymore" Says Wealthy SF Fed Chair From Ivory Tower](#), on [zerohedge.com](#), 4-Aug-2022

⁴² According to [OurWorldInData.org](#). As difficult as that is, we all know that \$10 buys less every year.

⁴³ This is not just a “poor country” phenomenon. We all know that even many with so-called “good jobs” are struggling financially: [70% of Americans are feeling financially stressed, new CNBC survey finds](#)—[CNBC.com](#), 11-Apr-2023. And consider this:

...the prospects of tens of millions of Americans have plummeted. More than 140 million of us now fall into poor or low-income categories, including one out of every six children. More than 44 million of us suffer from hunger in any given year. An estimated 183,000 Americans died of poverty-related causes in 2019, more than from homicide, gun violence, diabetes, or obesity. Meanwhile, ever more Americans are living on the streets or in shelters as homeless people hit a record 650,000 in 2022.

—William Hartung, [CounterPunch.org](#), [War is Bad for You...and the Economy](#), 28-Feb-2024

household income on food,⁴⁴ so rising food prices put a serious squeeze on budgets for everything else.

And it's clear that the globalization of the workforce—meaning that companies have re-located jobs to countries with the lowest salaries and benefits—has meant that salaries have not kept up with price inflation.

The impact on all those—most of the people on the planet, that is—struggling to “make ends meet” is devastating. People engaged in such a struggle⁴⁵ have little choice but to keep working, “keep their head down,” stay at a low-paying job for which they are ill-suited, put up with abusive bosses, keep kowtowing to those who have large amounts of money. *This may be the most widespread anti-freedom mechanism on the planet today.* This is what allows those who own the system to *corral most people's labor, time, energy, good will, generosity.* This is an iron fist of control: Serve the purposes of those with most of the money in the way they specify, or live in destitution; it's that simple.

This may be the most widespread anti-freedom mechanism on the planet today.

It is important to understand that it is not only the purchasing power of money that declines, it is the purchasing power of people's *labor*. If basic labor is all one has to offer in the marketplace, then such declining purchasing power is especially painful.

This is one of the main contributors to so much depression, desperation, alcohol and drug addiction, and so forth. People don't want to live the way they are living, but they feel they have no choice, no opportunity or freedom to change their circumstances. They feel trapped.

“Importantly, your mental health and happiness depend less on how much money you make and more on whether you're able to meet all your expenses,” Elizabeth Dunn, PhD, Happy Money's chief science officer, tells Health. “So it's that feeling of not being able to pay your bills, or make next month's rent, or pay off your debt that really seems to take a toll on mental health.”

—*Health.com*, [7 Ways Debt Is Bad for Your Health](#), 8-Nov-2021

Relentlessly rising prices also make it very difficult to live without debt. How many can afford to buy a car or a house without a loan? This forces people to take on debt, and some become debt slaves. Lots of people take on debt to maintain a certain lifestyle as prices keep rising faster than their income (which has been happening for large numbers of people in industrialized countries, especially the US, since 1971), so they load up on debt to live as though things are not actually getting worse for them, when in fact they are. Once debt starts to pile up, interest payments start eating up more and more income, compounding the problem.

⁴⁴ *WorldAtlas.com*, [Countries That Spend The Most On Food](#), 12-Mar-2019

⁴⁵ Some are starting to call them “wage hunters and gatherers.” See *AmericanAffairsJournal.com*, [The Long, Slow Death of Global Development](#), Winter 2022, Vol. VI, No. 4

This is nothing less than a serious theft of people's freedom. Some might object to the word *theft* here, but given that price inflation is a *choice* made by the authorities, not a necessity, then the word theft seems all too appropriate.

Money Supply Growth: How fast?

How much faster has the supply of money been growing than the supply of goods and services?

In the US, the supply of debt-based money grew 24-fold from 1980 to the middle of 2020, more than three times faster than the economy.⁴⁶

In the EU, the supply of debt-based money grew 13-fold over the 39 years from 1980 to 2019, almost three times faster than the economy.⁴⁷ And

no, European citizens were not 13 times richer because there was 13 times more money floating around. In fact, the amount of debt in the EU has become such a burden—that is, paying back loans plus interest consumes so much work and money—that the real economy in the EU was no larger in 2019 than it was in 2008. It is also noteworthy that consumer prices continued to rise while there was little, if any, growth in the economy.

There has been a startling level of this money-supply-growth in China. The supply of debt-based money grew 37-fold (!) in just the 23 years from 1996 to 2019, more than twice as fast as the economy.⁴⁸

Many people think: “Great! More money means more prosperity for everyone!” But they fail to recognize that for every unit of currency, for one party it is “money,” and for another party, it is debt.

Central banks

I mentioned above that central banks were actually *striving* to create price inflation from 2008-2021. If price inflation causes so much difficulty for so many people on the planet, why in the world would central banks try to *create* it?

Central banks create price inflation for two main reasons:

1. *Wealth effect*: Steady price inflation feels fabulous for those who own assets such as real estate and stocks. The price of what they own rises and rises. They feel like geniuses!⁴⁹ They feel more wealthy. Central banks try to enhance this “wealth effect” because they claim it stimulates economic growth: that when people *feel* more wealthy, they spend more, and borrow more. It is also true that a large portion of consumer spending in the economy (the estimate is 40%) is done by the top 10%

⁴⁶ FRED Economic Data, St. Louis Fed, [US MZM \(Money of Zero Maturity\)](#) and [US nominal GDP](#)

⁴⁷ Trading Economics, [Euro Area M3](#) and [Euro Area nominal GDP](#)

⁴⁸ Trading Economics, [China M2](#) and [China nominal GDP](#)

⁴⁹ See the truth on this “genius” claim in *Chapter 1: Real wealth versus transactional media* in *Book 2*.

This is nothing less than a serious theft of people's freedom. Some might object to the word *theft* here, but given that price inflation is a *choice* made by the authorities, not a necessity, then the word theft seems all too appropriate.

wealth bracket, so authorities set policy to create an environment that encourages spending by that upper bracket.

2. *Inflating debt away*: When the supply of money constantly increases more quickly than production, that is, with a lot more money around, each unit of currency is worth less than it used to be, that is, it buys less. This allows debtors to pay back old loans with money that is worth less than it used to be, and thus is easier to acquire. In effect, a debtor's debt load is reduced. For example, a \$400 monthly mortgage payment might have seemed like a lot of money thirty years ago when a person first signed their mortgage, but now, with much more money floating around, \$400 might seem like a very low monthly payment. The overall effect is that the percent of one's income that goes to paying this debt is reduced. That's precisely what central banks want in a world burdened by too much debt: to make the old and existing debts easier and easier to pay over time because the money has been cheapened. Most call that *inflating away debt*, a favorite policy of over-indebted governments for millennia. Then old debts impinge less on the current spending that central banks are trying to stimulate.

The problem is this: Those two reasons may seem great for those who own assets. The prices of their assets rise and rise, and the real cost burden of any debts they used to acquire those assets is less and less over time. This encourages them to use debt to “play offense” in terms of using debt to increase their financial wealth. So they might buy three or four houses instead of one on the assumption that the prices of those houses will rise and the debt will be easier and easier to pay off. (This helps drive up the price of houses, making them impossible for lower-income people to buy them.)

For those without financial assets—that is, most people—both reasons have a negative impact: Their salary is worth less and less over time, and so they need constant raises (an unusual phenomenon these days with corporations continually moving production to lower-wage countries or robots) to keep pace with price inflation. Any saved money they've been able to accumulate, as a cushion for unexpected expenses, purchases less and less over time. And if they save enough to start the process of buying assets, they have often been priced out of the market because the already-wealthy have been bidding up the price of those assets to sky-high levels.

Result? Constant money struggles for most people, increasing theft of people's time and freedom, and accelerating income and wealth inequality! It is all too clear why our education system does not educate people about how our money system really works. If people understood the system, they wouldn't tolerate it!

Chapter 20: Theft of stability, predictability: The crisis generator

The great danger is that under the pressures of anxiety and fear, the alternation of crisis and relaxation and new crisis, the people of the world will come to accept gradually the idea of war, the idea of submission to total power, and the abdication of reason, spirit and individual conscience. The great peril ... is the progressive deadening of conscience.

—Thomas Merton, *The Hidden Ground of Love: Letters*, 1985

Question: How is it that we have devolved from financial stability to what can now be rightly called a perpetual financial emergency?

From stability to perpetual financial crisis

Central banks employ more economists than anyone else by far. They always tell us that they know what they are doing, and have things under control. But it's obvious to anyone with a pulse that we keep having more and bigger financial crises.

Other than the Great Depression of the 1930's, financial crises used to be national; now they are sometimes global. The current financial state of the planet can rightly be called a *perpetual emergency*. We can say that because central banks came up with what they called "extraordinary measures" and "emergency programs" to deal with the Great Financial Crisis of 2007-2009 and

many of those measures were still in effect when a new banking crisis emerged in the US in September of 2019, and when the Virus Financial Crisis erupted in 2020.

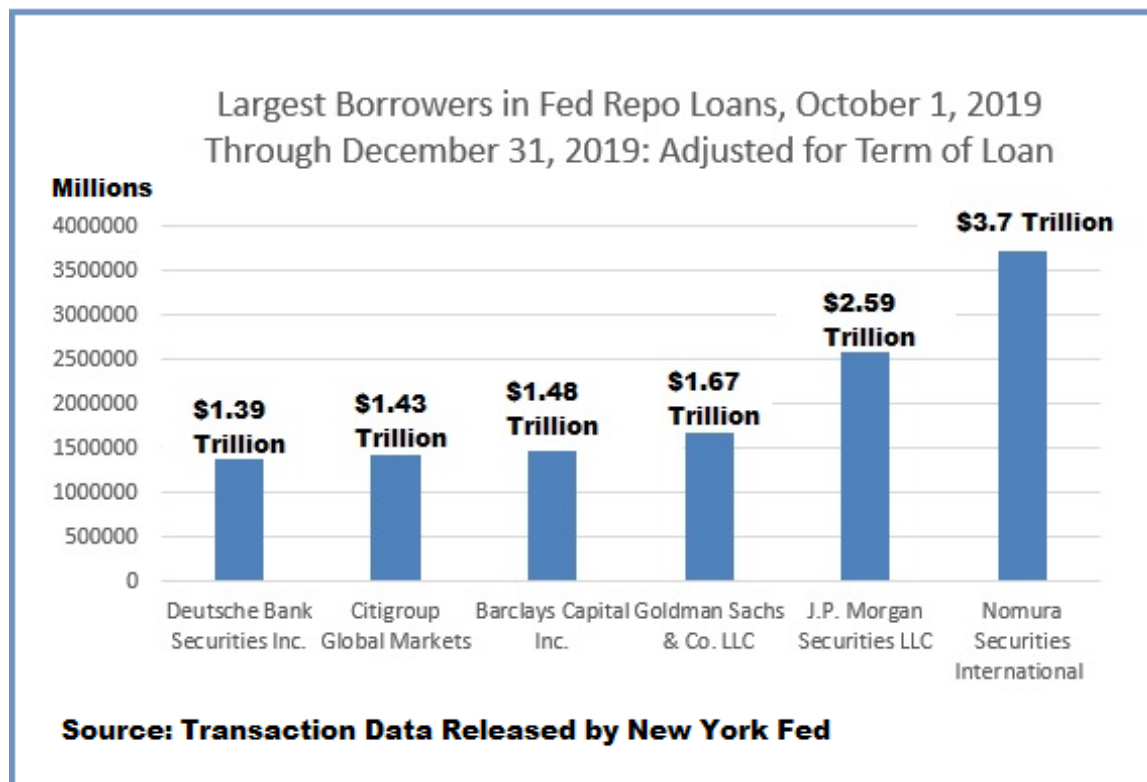
The current financial state of the planet can rightly be called a *perpetual emergency*.

The banking crisis that most assumed was caused by the 2020 pandemic started in September, 2019, *before* anyone had heard of this virus. From Reuters on Sep. 17, 2019, four months *before* the first report of a Covid case in the US:

That forced the Fed to make an emergency injection of more than \$125 billion over the past two days...

—Reuters.com, [Explainer: The Fed has a repo problem. What's that?](#), 17-Sep-2019

Such “injections” (that is, another bailout for banks) went on for months until the virus portion of the crisis saw the Fed creating over \$11 Trillion (!) in new loans to try to rescue the system from the next segment of the perpetual emergency. Fed injections reached a single-day total of \$1.4 Trillion by September of 2021.⁵⁰ Here is a chart of some loans the Fed made to bail out Big Banks in the last quarter of 2019, *before* the virus hit:



(Chart source: Pam and Russ Martens, *WallStreetOnParade.com*, [Fed Data on Cash Assets at the Biggest Banks Depicts an Out-of-Control Fed and Banking System](#), 28-Nov-2023)

Are there numbers to back up the assertion that we keep having more and more financial crises? Of course, or I wouldn't make the claim.

Two true monetary system insider/bigwigs—Harvard professors Carmen Reinhart and Kenneth Rogoff—released in 2009 a book on the history of financial crises called [*This Time Is Different—Eight Centuries of Financial Folly*](#). The book documents 800 years of currency collapses, banking crises, government debt defaults, hyperinflations, and deflations. The “this time is different” portion of the title makes fun of what defenders of the *status quo* always say when people tell them they are behaving in ways that have *always* resulted in financial catastrophe: “This time is different!” But it never is. The only way it *is* actually different this time is that the scale of the current conditions dwarfs all previous setups.

⁵⁰ For more, see [Fed Reverse Repo Soars To Record \\$1.35 Trillion After Fed Doubles Counterparty Limit](#), 23-Sep-2021.

Anyone who has read this book to this point can probably guess what the great leading indicator of crisis turns out to be. According to Reinhart and Rogoff:

If there is one common theme to the vast range of crises we consider in this book, it is that **excessive debt accumulation**, whether it be by the government, banks, corporations, or consumers, often poses greater systemic risks than it seems during a boom.

—Reinhart and Rogoff, *[This Time Is Different—Eight Centuries of Financial Folly](#)*, 2009, Page xxv [bolding by the author]

Wow! What a surprise! 😊 Over-indebtedness is the precursor of these crises! And today, instead of just a single country being in debt over its head, it's the entire world. We have more debt than ever, over \$313 Trillion worldwide, in 2023. We are likely setting some type of new galactic record.

Reinhart and Rogoff continue:

Debt-fueled booms all too often provide false affirmation of a government's policies, a financial institution's ability to make outsized profits, or a country's standard of living.

In other words, creating vast amounts of debt can make things appear very prosperous for a time; but then people have to pay for the debt-fueled party, it turns out they can't, and the inevitable crash arrives.

Since most readers have some familiarity with national banking crises—that is, the type of banking crises we saw in the US, UK, Iceland, Spain, and other countries in 2007-2009, where a significant number of banks fail, or receive a bailout to keep them afloat—let's take a quick look at that crisis category.

Banking crisis history

Reinhardt and Rogoff list national banking crises from 1802 to 2008, and I added to the list from work published by the IMF for 2008 through 2012.⁵¹ In all, the list has 299 national banking crises over 211 years, so just a little more than one per year.

But if we break down the list into different time periods, a clear insight emerges:

1802-1912	1 national banking crisis every 2 years (61 crises in 111 years, or 0.55 crises per year)
1913-1970	Just over 1 crisis per year (65 crises in 58 years, or 1.1 crises per year)
1971-2012	<u>Over 4 crises per year</u> (173 crises in 41 years, or 4.2 crises per year)

⁵¹ IMF, Systemic Banking Crises Database: An Update, IMF Working Paper, Luc Laeven and Fabián Valencia, 2012

So our modern period has had over four national banking crises per year somewhere in the world versus just one every two years in the 1800s. So one crisis per quarter instead of one every two years. That's **eight times** more crises in the modern period!

Why the breakdown into those time periods? Because these periods differed strongly in terms of what constituted money:

1802-1912	Gold coin standard (with short interruptions for wars)
1913-1970	Chipping away at the gold standard
1971-2012	The 100% debt-based money (the Debt Standard or “floating currency”) period

In the 1800s, money was gold and/or silver. Yes, people figured out ways to get into trouble with debt even then, but it was more difficult for a nation or region to achieve. From 1913 to 1970, the bank cartel took incremental steps to convert the system away from gold and toward banker-created money, that is, corporate currency. Their work was completed in 1971 when the world switched to 100% debt-based money, so-called *floating currencies*. Now money was no longer something real created by nature, it was debt created by bankers.

As mentioned, the 100% debt-based money period has had **eight times** more national banking crises: four per year versus one every two years. So it's not anyone's imagination that we have more such crises these days. And with the strong linking of money flows across the world, a national crisis in a major country can quickly go global.

The impact of such crises is anything but trivial: In the crisis of 2007-2010, over 9 million households lost their homes to foreclosure just in the US.

Now if a person thinks these crisis numbers are bogus because we now have a lot more countries with banking systems, Reinhart and Rogoff kindly list, starting on Page 151, the number of national banking crises over the years for each country. Here are the champions on that list, with the number of banking crises each country has had from 1802 through 2012:

France	15
United States	13
United Kingdom	12
The Netherlands	12
Brazil	11
Belgium	11
Denmark	10
China	10
Argentina	9
Germany	9
Spain	8

That's not exactly a list of countries people have difficulty finding on a world map! Those are major countries where governments, banks, businesses, and people are able to pile up huge debts because the country is considered to be a financially safe environment, leading to systemic and banking instability when some of those debts can't be paid.

And the list above shows that just those 11 countries accounted for 40% of *all* national banking crises for 1802—2012. So the increasing frequency of crises in recent years is not some “small-country-only” phenomenon.

The web site of a publication that is a staunch defender of the *status quo*, the *Financial Times*, echoed the claims above:

...the likelihood of particularly bad events has increased since the escape from the “golden fetters.”

— Matthew C. Klein, *FT Alphaville*, [Going off gold did the opposite of what many people think](#)

By conventional economic claims, this is very odd because if there is one thing a bigwig economist or banker is sure to tell you is that a gold coin standard is no good for you, that what’s good for you is money whose nature is entirely controlled by: Guess who? Economists and bankers!

Just food for thought the next time you hear a mainstream economist spouting off about what is and isn’t good for you. We cover the why (*Chapter 2: Why do economists get things so wrong?*) and how (*Chapter 3: How do economists get things so wrong?*) economists spread econo-mists instead clarity in *Book 2*.

Theft of predictability

Many businesses and individuals have a difficult time planning for longer timeframes, contributing to a plague of short-term thinking. No one knows what mortgage rates, real estate prices, stock prices, and so forth will be a year or two from now. They could be double, or be cut in half. When people regard the world these days, many feel like they are *not* standing on solid ground. This crisis environment takes a toll on us all.

Chapter 21: Theft of nature's brilliance: Addiction to growth

Forests precede civilizations ... deserts follow them.
—François-René de Chateaubriand, historian, 1768-1848

Question: Why are the authorities so obsessed with “growth, growth, growth” when growth, as currently practiced, clearly has downsides in terms of the environment on which we depend?

Because the supply of debt-based money must always grow, the Debt Standard forces us into a bizarre situation: our economy cannot reach a steady state; it must either grow or plunge. There is no middle ground. Economists are obsessed with the idea of achieving *equilibrium*, but it is a pipedream.

We can either have:

- *Growth*: The supply of money (debt) grows continuously to meet the ever-increasing demand for paying back loans plus interest. The growth scenario requires that loans (debt, bank credits, that is, our money) increase perpetually.
- *Plunge*: The supply of money (debt) does not increase sufficiently to repay existing loans plus interest due. When defaults in loan payments begin, banks curtail expansion of loans, leading to decreasing ability by people to repay loans plus interest, leading to more defaults, and so forth.

A stable, steady-state economy is not an option when money is debt. A steady-state economy would not produce the additional money needed to pay back loans plus interest.

A stable, steady-state economy is not an option when money is debt.

When money is debt, we become addicts for economic growth. We pursue “growth at all costs” policies. We seek perpetual, endless, infinite growth. The problem, of course, is that *we seek to tap finite resources to support that infinite growth*. And many have shown that economic growth and energy consumption are highly correlated.

With our world's laser focus on materialism, we are in an endless quest to expand consumption, often trampling on the brilliant bounty supplied by nature. The way we pursue financialized growth is killing our soils, draining aquifers, creating dead zones in our oceans, destroying species, depleting fisheries, creating mountainous quantities of waste, poisoning habitats and ourselves, and waging perpetual conflicts for resources. And yet we still worship at the altar of perpetual economic growth as currently practiced.

According to TheWorldCounts.com, we collectively extract resources from the Earth at well over *1,000 tons per second*. And we dump waste at almost 100 tons per second.

Some, recognizing the debilitating impact of our debt overload, seek a debt jubilee, at least for the debts of their own group. Still, without changing the *nature* of our money, what would that enable? Starting from the point of jubilee, we continue our pursuit of perpetual growth with a smaller debt burden so that we can continue even *more* rapid expansion of consumption?

And yet, as absurd as all this is, we continue. The nature of our money—that is, debt—forces our hand. We pursue growth, at all costs, and given our current heedless methods of doing so, even possibly the cost of our future.

Please let me be clear about this: I am all for economic growth that creates an increase of true wealth and abundance for humankind. But that is not what we have today. We live within a fanatical pursuit of *financial* growth, and the growth of consumerism to keep the money system from imploding. Activities that are negative in all aspects but one—that money changes hands—are regarded as positive economic growth in our system, including: preparation for war, war, and post-war rebuilding; poisoning people with food laden with toxicity and devoid of nutrition, and then treating their compromised health; and so forth.

Perhaps needless to say, addiction is not compatible with freedom, and always implies struggle. Whether or not they are aware of it, this is what our so-called leaders are promoting.

Real economic growth for all is discussed in *Book 2* and *Book 3*.

Chapter 22: Theft of peace: Addiction to conflict

Every gun that is made, every warship launched, every rocket fired signifies in the final sense, a theft from those who hunger and are not fed, those who are cold and are not clothed. This world in arms is not spending money alone. It is spending the sweat of its laborers, the genius of its scientists, the hopes of its children. This is not a way of life at all in any true sense. Under the clouds of war, it is humanity hanging on a cross of iron.

—Dwight D. Eisenhower, US President, Republican Party, 16-Apr-1953

Mankind must put an end to war, or war will put an end to mankind. War will exist until that distant day when the conscientious objector enjoys the same reputation and prestige that the warrior does today. Never have the nations of the world had so much to lose, or so much to gain. Together we shall save our planet, or together we shall perish in its flames.

—John F. Kennedy, US President, Democratic Party, Address to the UN General Assembly, 1961

Of all the enemies to public liberty war is, perhaps, the most to be dreaded, because it comprises and develops the germ of every other. War is the parent of armies; from these proceed debts and taxes; and **armies, and debts, and taxes are the known instruments for bringing the many under the domination of the few**. In war, too, the discretionary power of the Executive is extended; its influence in dealing out offices, honors, and emoluments is multiplied; and all the means of seducing the minds, are added to those of subduing the force, of the people... (There is also an) inequality of fortunes, and the opportunities of fraud, growing out of a state of war, and... degeneracy of manners and of morals.... **No nation could preserve its freedom in the midst of continual warfare.**

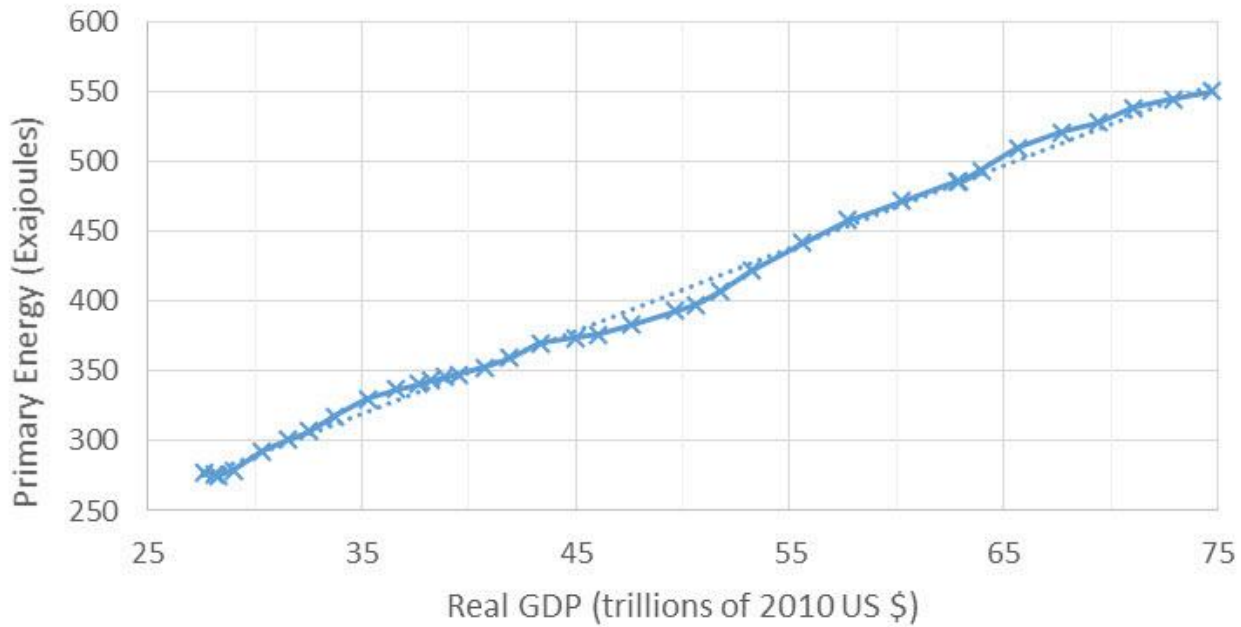
—James Madison, US President, 1807-1819, *Political Observations*, 20-Apr-1795
[bolding by the author]

Question: Why does the level of conflict on this planet seem to grow and grow? Why do we have perpetual war?

Does our money system play a role in generating the pervasive conflict plaguing the world? Indeed it does, in multiple ways.

Having an addiction to economic growth leads to conflict and war. Why? Governments are well aware that our current form of economic growth depends on the use of energy. Here's a chart showing the lockstep correlation between global economic growth and energy consumption over 35 years:

Primary Energy vs Real GDP 1980-2015



(Source: *PeakOilBarrel.com*, [The Energy Transition](#), 30-Jul-2016)

So the tragedy of war is often located in regions with a rich supply of energy resources. In our quest for perpetual economic growth, we have added perpetual wars to the tragedy of periodic wars.⁵²

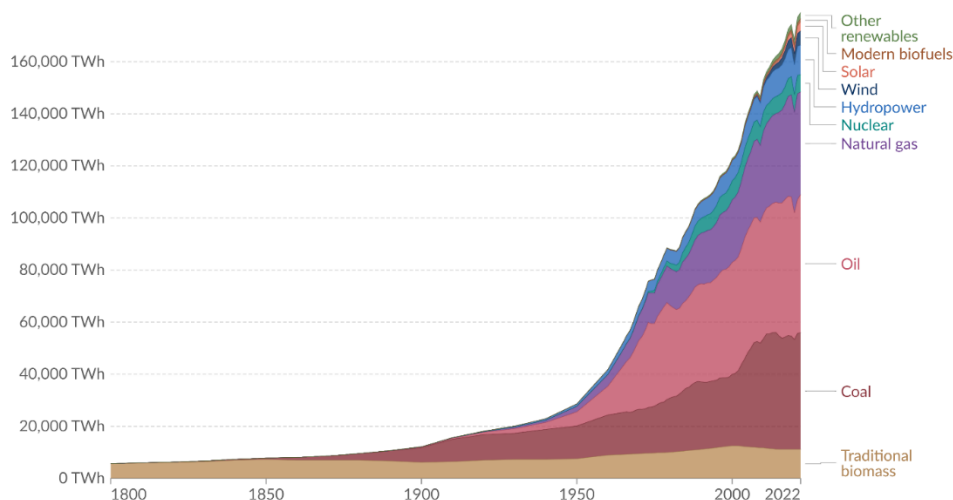
Renewables still provide only a very small percent of global energy use:

⁵² Do I need to point out that perpetual war would be impossible without borrowing money to fund it?

Global primary energy consumption by source

Primary energy is based on the substitution method and measured in terawatt-hours.

Our World
in Data



Data source: Energy Institute - Statistical Review of World Energy (2023); Smil (2017)

Note: In the absence of more recent data, traditional biomass is assumed constant since 2015.

OurWorldInData.org/energy/ | CC BY

(Source: Hannah Ritchie (2021), *OurWorldInData.org*, “[How have the world’s energy sources changed over the last two centuries?](#)” 14-Jan-2024)

Manufacturing renewable energy equipment currently requires rare minerals and significant quantities of fossil fuels. A changeover to all renewables would utilize vast resources. For example, large wind turbines require from 200 to 1,300 tons of concrete for their foundations. Even further, manufactured “renewables” are coming to be known as “replaceables” as lithium batteries in electric vehicles need replacement in 8 to 10 years, solar panels in 20 to 25 years, and so forth.

Though there are some who believe so, these are not problems that can be overcome by simply borrowing huge amounts of money,

Geopolitics

Threats, lies, sanctions, cyber-theft, cyber-sabotage, currency wars, trade wars, and cold wars have become commonplace among countries. Countries spend a great deal of money and energy on these threats. Those with advanced technology bases develop ever more deadly weapons because “if we don’t, our enemies will;” and such “products” are great for boosting exports (since we must have “growth!”).

To keep resources cheap for the most powerful countries, in an updated version of colonialism, lesser-developed countries are offered loans that result in debt slavery that forces them to hand over the keys to their resources in “debt-restructuring” negotiations.

A great deal of “foreign aid” from richer countries must be spent with multi-national corporations of the *donor* country, enabling those corporations to commandeer resources and attain dominant positions in the target nation.

National politics

Within countries, politics has become a playing field for hatred as wealth inequality, debt slavery, downsizing, racism, media focused on corporate profits above editorial integrity, corruption, secrecy, Orwellian doublespeak, and loss of political power leaves many in fear, anger, and exhaustion as they try to keep the wolf at the door from destroying their household.

People grasp at political solutions spawned from desperation to try to keep themselves from levels of depression that can easily lead to substance addiction. Authorities counter with steadily increasing surveillance, SWAT tactics, and thefts of freedom, fanning the fires of rage and making the problem worse.

Political discourse is typically overpowered by emotional outbursts. Fierce verbal takedowns of adversaries are celebrated as a sign of the attacker's intelligence. "News" outlets are undisguised purveyors of partisan propaganda and personal attacks on the opposition. Somehow, "research" from think tanks always favors those who fund the research and is used to give an objective air to attacks on opposing views.

When I was CIA Director, we had entire training courses on how to lie, cheat and steal.

—Mike Pompeo, U.S. Secretary of State, 2019

Whatever happened to: "Thou shalt not steal"? "Thou shalt not lie"? How did we get to a point where people are proud that they ignore such ideas? How did "Thou shalt not kill" plus "Love thy neighbor" get turned into "It's OK, in fact, patriotic, to kill thy neighbor."?

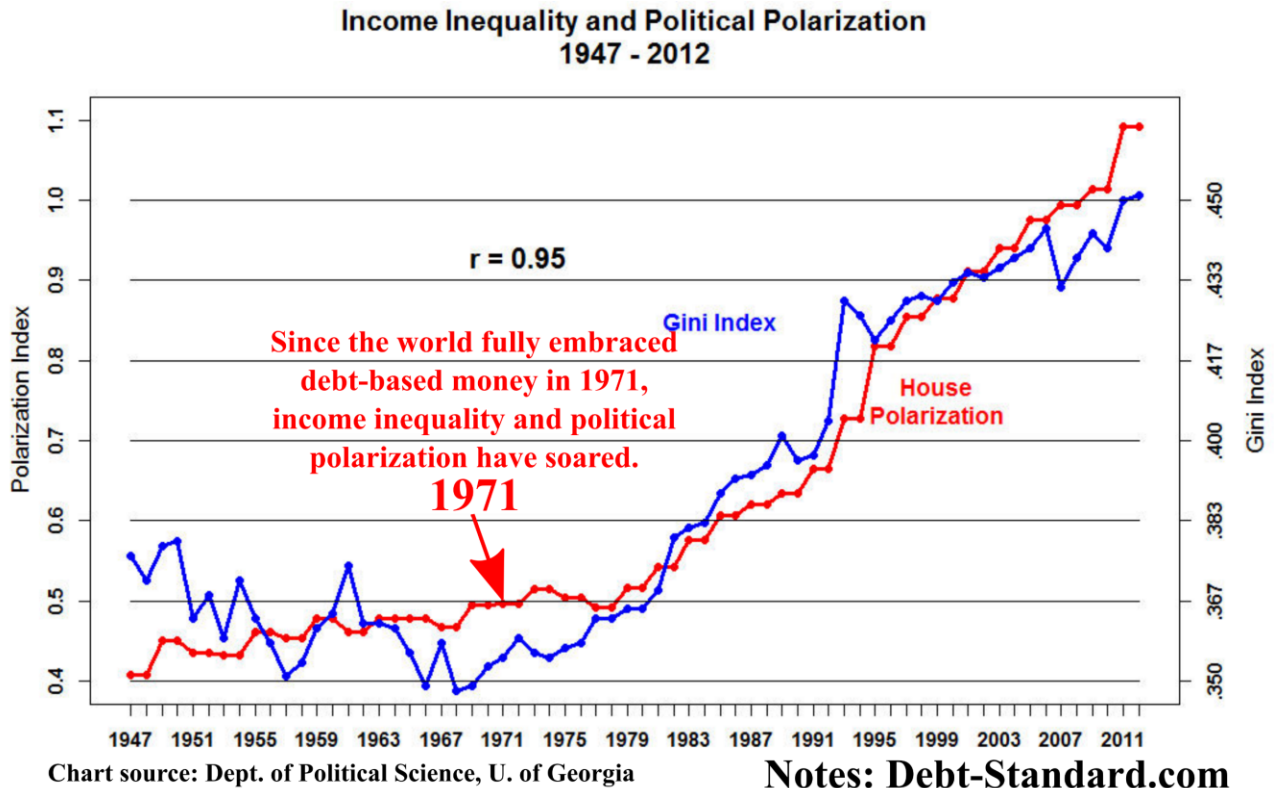
How have so many come to believe that the end justifies despicable means? How often will we keep falling for what is clearly a garden-variety psychological projection—"yes, what we're doing is atrocious, but if we don't do it, our enemies will"—in weapons development, espionage, the granting of monopolies, gain-of-function research on deadly viruses, and so forth?

How have so many come to believe that the end justifies despicable means?

Many have abandoned principles of common human decency and yet blame "the other side" of the conflict for all of the world's ills, blame their opposition for *their* loss of principles, rationalizing that their opponents are *so* bad that conquering them by all available means is more than justified, in fact, noble.

Such losses of principle accelerate division and conflict, with many descending into tribalism fully convinced that *everything* their tribe does is perfect, and *everything* another tribe does evil. Middle ground, points of agreement, nuances, and shades of gray are entirely lost in the emotional fray.

When an economic system *guarantees* accelerating wealth inequality (among people and nations), debt slavery (of people and nations), and addiction to growth that results in pervasive conflict, it's difficult to argue with the idea that one major goal of that system is to divide (and conquer).



(Source: [The Politics of Income Inequality](#))

Politics is often contentious, but since 1971, as everyone is aware, we have devolved from contentious to rabid.

Now one might rightly ask: Why in the world would anyone create or defend a conflict generation system? Primarily because a divided populace is a conquered populace. Divide and conquer has long been a key strategy of elites in power, deployed by Julius Caesar, documented by Machiavelli.

A divided and conquered populace is forced out of a rational, perceptive stance from which people can correctly analyze what is happening to them, and into an emotion-drenched stance where, for many, blaming others plays a key role. Such a descent into constant emotional battling prevents most from seeing and advocating what would actually help them, which leaves our money system free to continue its pernicious ways, for the most part undetected and unfettered.

Those seeking to divide and conquer have attained much success.

Debt-based money is not one, it harbors multiple dualities that breed conflict

Weekly, or even daily, most of us transact in the financial system. This puts our debt-based money smack in the middle of many of our interactions with our fellow human beings. And as we have seen, that money is not one thing, it is two: one is owed, another owes. What could be more different?

This money harbors a second duality: Economists say that our money is both a *medium of exchange* and a *store of value*. It's very good at the first and very poor at the second. How could a store of value be something that constantly loses purchasing power *by design*?

A third duality is that debt-based money enriches those who are predominantly interest receivers and can be brutal for everyone else, the interest payers.

These dualities at the very center of our economic system guarantee conflict. Given that acute and increasing polarization now threatens our society, indeed our world, it seems less than intelligent to have dualities right at the center of our money system—unless, of course, one's aim is to keep humanity divided and conquered.

Would all of these conflicts magically disappear if we didn't use debt-based money? No. But debt-based money powers a dualism that makes these conflicts impossible to resolve.

Who can deny that humanity is currently plagued by division? Debt-based money plays a key role.

Chapter 23: Theft of time

There is more to life than increasing its speed.
—Mahatma Gandhi, On Life & Speed

Question: How come everyone seems to be ever-busier, running around faster and faster, with little or no time for what is most important to them?

Why are so many so busy, to the point of serious stress, leading many to rely on alcohol or drugs (legal and illegal) to “chill out,” and sometimes leading to serious cases of burnout or illness, or even suicide?

In so many ways, this makes no sense at all: the last 200 years have seen one labor-saving, productivity-enhancing invention after another. We had the Industrial and Agricultural Revolutions, a Transportation Revolution, the Computer Revolution, the Telecom Revolution, the Information Revolution. Each of those contained an array of remarkable inventions that were supposed to make our life *easier*, not busier. Now we have the “AI revolution” that is supposed to take the drudgery out of everything. Given the performance of those past revolutions, some skepticism seems appropriate.

In the 1920’s and 1930s, leading economists such as John Maynard Keynes observed automation enabling massive increases in productivity. They thought there would be very little work left for people once what they called “the economic problem”—that is, the securing of enough goods to meet the basic needs of everyone on the planet—was solved. Keynes guessed that it would be solved in one hundred years. He expected that society *might* then be able to find ten or fifteen hours of work per week for those who still wished to work.⁵³

So what went wrong? What was overlooked was that the world was heading toward our current situation where our money is actually debt, that is, loans that must be paid back with interest, requiring an ever-increasing supply of money (debt) to keep paying back the ever-growing loans plus interest due. If one looks at an historical chart of the money supply of any economy in the so-called developed nations, one will see this relentless, exponential growth of the supply of debt.

Let’s refer to that \$10,500 loan due in one year, discussed earlier. The borrower almost certainly spent the borrowed \$10,000 money when they received the loan; otherwise, why would they have borrowed it? So now, over the next year, they have to come up with \$10,500, above and beyond their living expenses, to pay off the loan. For most borrowers, it means they have to do extra work or be more frugal or draw down previous savings to pay the interest. In other words, many of them need to run faster.

The math on this is very simple, as expressed by Damon Vrabel:

Our economic model is built upon fundamentally unstable math:

$$P < P + I$$

⁵³ John Maynard Keynes, *Economic Possibilities for our Grandchildren*, 1930

P is all the money in the economy at any given time (Principal). *I* is the Interest that compounds on top of *P* that must be paid back. So the economy is constantly **running faster and faster** to generate more *P* in order to payback *P+I*. That creates perpetual exponential growth ... and deeper servitude over time.
—*Renaissance 2.0 - Financial Empire*, 2012

Most people can't afford to buy houses or cars without taking loans. Many can't meet basic expenses without piling up credit card debt, often due to the fact that, as jobs are outsourced to countries with lower wage levels, salaries in many industries have been stagnant for decades while prices have continued their relentless rise. Many seek second and third jobs to meet these rising expenses. So there a lot of people running faster to keep up with repaying the amount they borrowed, plus the interest on their debt.

Many report being supremely stressed as their endless task list prevents them from spending anywhere near enough time on who or what they believe is most important in their life.

There is a crucial factor in play here that few keep in mind: When interest is paid, *someone* has to pay it. Someone has to work to earn that interest before it can be paid. While your reaction to this might be, "Well, of course," there's evidence that many misunderstand what is happening here. Want that evidence?

"I want my money to work for me"

What is misunderstood here arises from yet another widely-held illusion. A very successful campaign has been waged that tells people they are idiots if they have some savings and they don't get that savings "to work for them." So people start saying, "I want my money to work for me," and they believe that this is the smart way to regard money. But observe a stack of money on a table. You'll wait for a very long time (forever, in fact, if you decide to allocate the time) before you see that money perform any work. The same is true for the electronic computer bits that represent our bank account money: they don't do any work either. *People* do work, always assisted by nature and often assisted by machines built by people.

The same is true when someone collects interest. It does not magically arrive from somewhere over the rainbow. Some borrower acquires money and pays interest on their loan, and others collect that interest. Remember from the [Facts](#): One party owes, and another is owed. *When interest flows, someone pays it*. So collecting interest is often a perfect example of *reaping where one has not sown*.

I am not blaming anyone for wanting their "money to work for them." Most people are well aware that, if they simply keep their savings in cash, it steadily loses purchasing power. And so many are spending what they feel is way too much time on their job(s), so they are seeking some relief.

But work on the physical plane isn't as easy as creating loans and shuffling money around. Building a house isn't as easy as drawing a picture of one. So real economies are growing much more slowly than the supply of money (See *Money Supply Growth: How fast?* above).

The amount of debt plus interest that must be paid is growing far more rapidly than the physical plane economy, meaning that more and more output from the economy must be dedicated to paying off debt. This means that people, as a group, or at least a substantial portion of that group, need to work harder and harder to keep up with those payments.

That's one of the main reasons that most people are so busy! The burden weighs heavily on those doing the productive work in the society. It is their work that creates the money for the payment of the ever-increasing interest and debt-repayment burden. (Some call these people the "tax-donkeys" since they are the group that is not rich enough to buy tax breaks and not poor enough to qualify for government assistance programs, so they pay a substantial share of their earnings as taxes, which can place them in perpetual financial stress.)

Want evidence? Here's a quote from a survey by the well-respected Gallup organization:

The more cash-rich working Americans are, the more time-poor they feel ... Working adults who report being time-poor are less satisfied with their personal lives ... Additionally, time-poor working Americans are far more likely to say they experience a lot of stress ... and those with a college education are also among the most likely to lack the time they need.
— [Gallup.com](https://www.gallup.com), 20-Jul-2007

Many think that corporate executives "have it made" in this system, but the following is from a 2022 survey of executives by accounting mega-firm Deloitte:

Almost 70 percent of executives admitted that they are seriously thinking of quitting their jobs for a better opportunity that supports their well-being ... Roughly one in three employees and C-suite executives admitted to constantly struggling with poor mental health and fatigue. While 41 percent of executives "always" or "often" felt stressed, 40 percent were overwhelmed, 36 percent were exhausted, 30 percent felt lonely, and 26 percent were depressed... "Most employees (83 percent) and executives (74 percent) say they're facing obstacles when it comes to achieving their well-being goals—and these are largely tied to their job," the report says.⁵⁴

So humanity runs faster and faster (especially those with more money and education!), works more and more, to try to keep up with repaying ever-growing debt and the interest due. **Our debt-based money system is stealing our time—for the financial benefit of the small group that collects a *lot* more interest than they pay.**

Let's be clear: Stealing time is stealing life. What is it that people want when they are told they have a terminal illness, that they are going to die soon? Most want more time. Why? Because time is the great gift of opportunity. Opportunity for what? For whatever is most important to each person; for them to transcend their current situation. And the fact is, most people on the planet feel like they don't have enough time to spend on what is most important to them. Ask almost anyone.

Let's be clear: Stealing time is stealing life. What is it that people want when they are told they have a terminal illness, that they are going to die soon? Most want more time.

Our time is being stolen by our debt-based money system, which turns that great gift of opportunity into a problem as people dread the passing of time because they hear the clock

⁵⁴ *The Epoch Times*, [Majority Of C-Suite Execs Thinking Of Quitting, 40% Overwhelmed At Work: Deloitte Survey](https://www.foxnews.com/story/majority-c-suite-executives-thinking-quitting-40-overwhelmed-at-work-deloitte-survey), 23-Jun-2022

ticking toward their monthly payments. *So time feels like a problem rather than a gift.* What kind of insane tradeoff is that?!

And the whole thing has some massive delusions at its base. Frederick Soddy, natural scientist extraordinaire and winner of the 1921 Nobel Prize in Chemistry, pointed out over 100 years ago:

So time feels like a problem rather than a gift. What kind of insane tradeoff is that?!

The idea that people can live off the interest of their mutual indebtedness is just another perpetual motion scheme – a vulgar delusion on a grand scale.... Debt grows at compound interest and as a purely mathematical quantity encounters no limits to slow it down. Wealth grows for a while at compound interest, but, having a physical dimension, its growth sooner or later encounters limits. Debt can endure forever; wealth cannot, because its physical dimension is subject to the destructive force of entropy. Since wealth cannot continually grow as fast as debt, the one-to-one relation between the two will at some point be broken – i.e. there must be some repudiation or cancellation of debt.

—Quoted by scientist Philip B. Smith, *Economics Unmasked: From Power and Greed to Compassion and the Common Good*, Kindle Edition, P. 10.

In other words, we have created a money system mathematically guaranteed to fail, noted in this quote in 1784:

One penny put out at our Saviour's birth to 5 per cent compound interest would, before this time, have increased to a greater sum than would be contained in two hundred millions of earths all solid gold.

—Richard Price, *Observations on the Importance of the American Revolution, and the Means of Making it a Benefit to the World*, **1784**

Where might one store two hundred million Earths of solid gold? How could one obtain all that gold from a single Earth? Impossibilities! That is, our system is founded on impossibilities.

This hardly seems like good way to run a planet if general prosperity and happiness is what we are after. On the other hand, if the aim is to have a small group that is exceptionally rich with everyone else scrambling to pay them and work for them, well then, it sounds like the design of the system is working very well.

When money is debt, all of this is predictable, inevitable. And this is the system the authorities of our *status quo* want to keep! A system that has its own demise built into it. But when people have power and wealth in a system, almost all of them want that system maintained at all costs. From where they sit, it looks like a great system. They are mistakenly or willfully blind to the ramifications of the design of the system and their part in it. And most of them ignore the realities of our world, or just keep on hardening their hearts, or both.

People who live far below their means enjoy a freedom that people busy upgrading their lifestyles can't fathom.

—Naval Ravikant⁵⁵

⁵⁵ Eric Jorgenson, *Almanack of Naval Ravikant*, [Choosing To Free Yourself](#)

Again, am I claiming that debt-based money is the only cause of people's increasing feeling of being too busy? Of course not. Everything is connected. There are other reasons.

Because it is so distressing to so many, researchers are trying to understand this phenomenon. One place that analyzes that research is Sloww.co in posts such as: [Busyness 101: Why are we SO BUSY in Modern Life?](#) (7 Hypotheses). But as is usually the case, the nature of the money system is hidden from most researchers. It is like asking fish to describe being wet: we live in it, so we find it difficult to see our system as an outside observer would.

Am I saying the being busy is somehow inherently bad? Perhaps not if the person is making a conscious choice to be that busy in service to a freely-chosen aim that suits their unique talents and experience. But it is the forced nature of so much busyness that is the real problem. This is where this crucial theft of time—of life—occurs.

Rest Stop 4

(Galactic Center, Milky Way. Source: NASA, [Astronomy Picture of the Day](#), 31-Mar-2020)



Whew! Break time!

I know, we've been told all our lives that our money system offers equal opportunity to all and that it's a wealth generation system. But things are not as we've been told! There's no time like the present (after a short break, of course 😊) to see the thing for what it is.

In our inner and outer life, living by illusion exacts a price that we can't comprehend until we see the illusion, understand its source, and transcend it. We're starting to see that the price of illusions about our money system is very high. And in fact, it's even higher, as we'll see below.

So it's probably a good idea to take a break and connect with nature. Anything in the natural world—a flower, a tree, a garden, the sky, or the Galactic Center (or the Great Central Sun, as some call it) shown in the photo. Or, if you are following a spiritual path, go deep inside, and be refreshed!

Happily, nature is not at all like our money system. This money system was not delivered by divine or natural law, so we *can* collectively choose to create a more enlightened one.

Chapter 24: The Debt Standard: Real-for-paper instead of real-for-real

Question: Let's take a break from enumerating consequences and ask this important question: *What's the real enabler of all of these devastating consequences?*

When we allowed the bank cartel to take us off the Gold Coin Standard and put us onto the Debt Standard, the fundamental nature of our economic exchanges was changed. Under the Gold Coin Standard—or silver coin standards that prevailed at certain times—economic exchanges were considered *real-for-real*. The real work, energy, know-how, time, natural resources, products, land, and so forth, provided by people were exchanged for real money, sourced from nature: gold and/or silver. Under the Debt Standard, economic exchanges are *real-for-paper*, that is, real work is exchanged for paper or electronic money created by the bank cartel, which are promises to pay. So other accurate phrases would be *real-for-promises*, *real-for-debt*, or *real-for-tokens*.

As we shall see, this in itself has far-reaching consequences because it means that whoever creates this unreal money can make claims on the real using what is ephemeral, and which they can conjure from nothing!

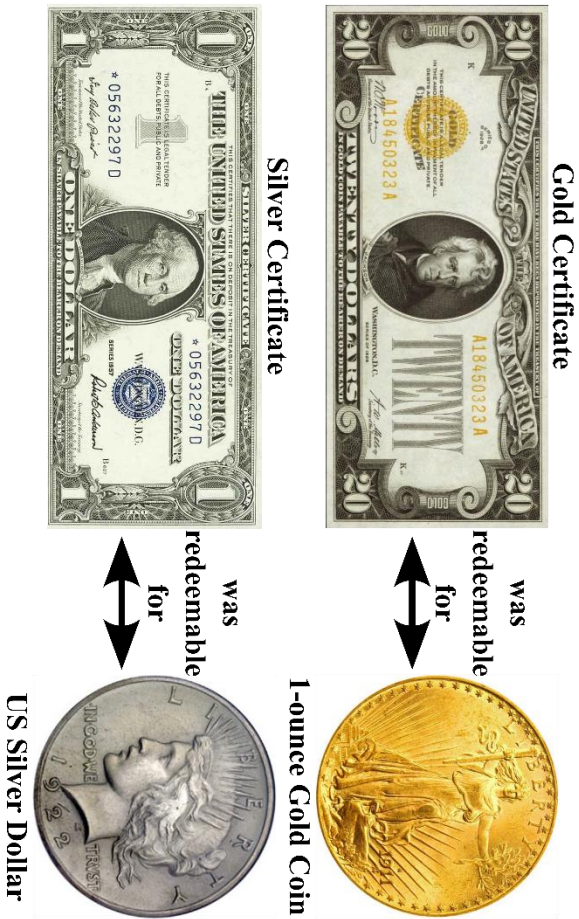
What real-for-paper means is that the money creators and their associates want, and get, *something for nothing*. The result is that this something-for-nothing quest becomes a driving economic principle for many throughout the society, infecting the world like a disease. (For more details, see the chapter *Something for nothing* in *Book 2*.)

When we discuss proposals for a new money system in *Book 2* (in the chapter *Some proposals for a better money system*), we'll see that almost none of these proposals even attempt to address this crucial real-for-paper problem, leading one to understand that most are unaware of its far-reaching implications.

The bank cartel has done a spectacular job of obscuring the true nature of our money system. The graphic on the next page shows the truth of the matter.

...it means that whoever creates this unreal money can make claims on the real using what is ephemeral, and which they can conjure from nothing!

Gold Coin Standard (Real-for-real)



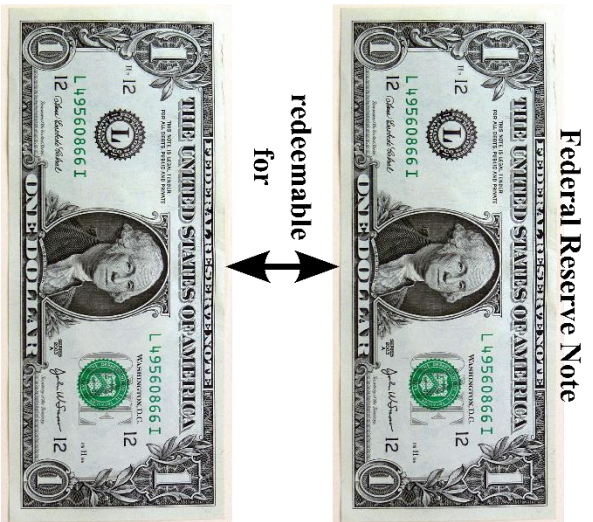
Under the old Gold Coin Standard:

- Economic exchanges were real-for-real. When people provided the real (goods, labor, energy, time, know-how, land, etc.), they received the real (gold or silver) in return.
- For something to count as money, it had to be a gold or silver coin, or be a certificate representing vault-stored gold or silver.
- Since paper money represented gold or silver coins or bars, it was exchangeable for such coins or bars by anyone at any bank.
- People value the gold and silver coins because of what they are.
- No one is “under the gun” to pay up for the coins to have value.

Details are available at:
Debt-Standard.com

Gold certificate image is from LeftoverCurrency.com.
Silver certificate image is from Heritage Auctions (HA.com).
Gold coin image is from GainsvilleCoins.com.

Debt Standard (Real-for-paper*)



Under the Debt Standard (our current money system):

- Economic exchanges are real-for-paper, or more accurately, real-for-debt. When people provide the real, they are paid with money conjured from nothing via loans from the bank cartel (commercial banks plus central banks).
- For something to count as money, it must be debt: one party owes, and another party is owed.
- Paper money, bank deposits, Treasury Bills ... all are promises to pay, that is, someone is “under the gun” to pay up for the money to retain value.

* Or Real-for-debt, Real-for-promises, or Real-for-tokens.

Chapter 25: Why do people use their national currency as money?

Question: Why do the Japanese use Yen, Russians use Rubles, Iranians use Rials, and so forth?

If our money is as bad as claimed in this book, why do people use it? How do governments—national governments and those that preside over a currency zone such as the European Union—get people to accept that the money that government declares to be money has value?

Some people are well aware that their national currency loses value; the only question is how quickly it does so. (We call it “price inflation,” but when the prices of most things rise persistently, be assured that it’s the money that is losing value for buying the real.)

Many central banks—including those in the US, EU, and UK—actively work to *reduce* the value of the currency, ensuring that people will get less for their money and their salary over time. (They call this “inflation targeting” and they say this intentional reduction of the purchasing power of your money is good for you. Really.⁵⁶ As people say, “You can’t make this stuff up.”)

First, let’s describe the two major types of money:

- Money that has value in its own right, that is, money with *intrinsic value*, such as salt, cows, or coins made of silver.
- Money that is a *token* representing value, such as paper currency, base metal coins, or electronic bits stored on computers.

Currently, the world uses token money almost exclusively. So how do national authorities get people to use these tokens, and to accept that they have value? The short answer is: *they give people very little choice*. This is implemented in six ways, each of which is described below:

1. *Taxes must be paid in the national currency*
2. *Legal Tender laws force people to accept payment in the national currency*
3. *Loans by banks are loans of the national currency and require repayment in the national currency*
4. *All government expenditures are paid in the national currency*
5. *Use of any currency other than the national currency incurs capital gains taxes*
6. *Widespread financial struggle severely limits currency freedom*

⁵⁶ US Federal Reserve, [Why does the Federal Reserve aim for 2 percent inflation over time?](#)

1. Taxes must be paid in the nation's currency

The Bank of England (“BoE”), the central bank of the UK, gave a straightforward answer to this question of why people use their national currency in one of their quarterly bulletins:

To be comfortable holding currency, people need to know that at some point someone would be prepared to exchange those notes for a real good or service, which the state can help guarantee. **One way it can do this is to make sure that there will always be demand for the currency by accepting it as tax payments.**
—BoE, *Quarterly Bulletin*, 2014 Q1, Page 10.

More honesty would have been achieved if they had said *demanding* it as tax payments rather than *accepting*. Try bringing a Yap stone disk to the tax collector to see whether *demanding* is the right word. (Those stone disks were money on the island of Yap in Micronesia.)

So taxation is a form of defense for a national currency, that is, it gives currency a *guaranteed use value*. And it wouldn't do so unless the taxes due were in amounts anyone would consider substantial; if taxation amounts were minimal, this “defense of the currency” factor would also be minimal.



2. Legal Tender laws force people to accept payment in the national currency

Then the BoE followed the quote above with another important sentence:

The government can also influence that demand somewhat by deeming that currency represents ‘legal tender’.

For example, paper US Dollars say, “This note is legal tender for all debts, public and private.”

While governments claim that people are not *forced* to use their national currency for transactions, and that may technically be true, the claim rings hollow. Most people are in full belief that the national currency must be accepted for payments, and for good reason.

For example, let's say you legally parked your 2012 Subaru Outback in a city and one of the city's garbage trucks smashed into your car, totally wrecking it. No court would force the city to compensate you with a 2012 Subaru Outback. The city could simply write you a check denominated in the national currency for what a court would consider the *currency value* of your car. If a person went to court demanding to be paid in a Subaru, cryptocurrency, or gold coin, the court would ignore that request, perhaps rudely.

3. Loans of the national currency require repayment in the national currency

This may be the most powerful of these factors in terms of “giving the currency value.” We have seen from [Facts 1-3](#) that in order for modern money to circulate in the economy, someone must borrow it into existence from a bank. Almost all loans from a nation’s banking system are for loans of the national currency. This means there is always demand for the national currency ... *so that people can pay back their loans!*

Think of it this way: even if you succeeded in using bitcoin every day for purchase transactions, if your mortgage is denominated in your national currency, then you have to acquire some of that national currency to repay your mortgage. So every month, you’d have to sell some of your bitcoin to **buy** some national currency. Such buying is demand for the national currency, thus helping to keep its price at a certain level. The price of anything that lots of people need to **buy**—either with their bitcoin, their gold, or with their labor to obtain a salary—remains elevated because of demand for that item, even if that item is money itself. Think of all the ways in which we **buy** some money—we sell: our labor, our used car, investments, and so forth. All of these are ways in which we trade something for currency, also known as **buying** some currency. So when the national currency is debt-based, then there is always massive demand for the currency for repayment of the bank loans that created it in the first place.

4. All government expenditures are paid in the national currency

Government-administered salaries, safety net benefits, pensions, and contract payments are all paid in the government’s national currency. Since such expenditures now comprise a substantial portion of national economies—for example, about 62% in France, 44% in the US, and 14% in China. This is yet another massive support for the use of the national currency.

5. Use of any currency other than the national currency incurs capital gains taxes

In most countries, if you buy and sell the currency of some other country, your host country will tax you on any gains you made from buying and selling that currency, *gains* being the difference between the price paid when you bought the currency and the price at which you sold it. So if you live in the US and trade New Zealand Dollars, Bitcoin, gold coins, or silver coins, the US government wants to know whether you profited from such trades—requiring you to separately report every such “trade” on your tax forms—and wants to take its cut of your profits. What it means is that if you do money transactions in a currency other than the national currency, the government considers those transactions to be the purchase and sale of *assets*, just as if you were buying and selling shares, or real estate, or a manufacturing company. So you have to track the date and amount of every purchase and sale, report these on your tax forms, and pay taxes on any “profits,” with profits calculated, of course, in your home national currency. This is a very strong deterrent to regularly doing business in a currency other than the national currency, entailing onerous record-keeping. (There are companies that will do such record-keeping for you, but of course you have now given up your financial privacy to both this company and to the tax collecting authority.)

* * *

So in our modern world, those five factors combine to create a *very* strong incentive for people to use the fiat currency approved by the national government. In other words, it's not difficult to make the case that people are well-nigh *forced* to use the national currency and that this forcing is what actually gives the currency much of its "value," at least within the borders of any nation or currency zone.

The only time people stray from this force is when the currency is hyper-inflating, or nearly so; or when it appears that the government will collapse. Then, people will start transacting as much as they can on what the government considers a "black market" where some other currency is used. Typically, this will be a currency from another country or currency zone (the use of cryptocurrencies for this purpose is growing) that is considered more stable and reliable than that of their own government, thus the foreign currency is seen retaining its value (transcending time) *far* better than the local currency. But for the most part, since most people prefer to live within the law, this only happens in extreme cases. Recent examples, as this is being written, are Zimbabwe, Venezuela, Iran, and Turkey.

To sum up the above, most people in the world are quite "boxed in" with respect to their choice of what currency to use in their daily life. Governments make it *very expensive* and cumbersome (or even illegal if people transact on the black market) for people to exercise choice and use a currency other than the official national currency.

So all told, it doesn't look as though people are making a judgment about the *value* of their currency and deciding to use it based on that value, they actually have no choice. The nation-state, its central bank, plus the large banks control the money printing press which gives them tremendous power over people, and they create serious impediments to any decrease of that power and control.

6. *Widespread financial struggle severely limits currency freedom*

Some authorities argue against the five-point case above by saying that people *do* have choice in their use of currency because there is no law *preventing* them from using the currency of some other nation for their daily transactions. That may be true for a rich person who could convert a portion of their money into bitcoin or silver or a foreign currency and easily tolerate the extra transaction costs, taxes, and possible loss of value due to price fluctuation that would result from daily use of an alternate currency. But for anyone who is under any level of financial struggle or stress—and that is a very large number of people these days—there is no way they could afford the losses associated with extra transaction costs and taxes, or the risk of loss of value due to the fluctuation in the price of, for example, bitcoin or silver. Such extra expenses and risks might mean they run out of money before receiving their next paycheck, leaving them unable to buy food or pay rent.

Once again, we see the usefulness to the owners of the money system of having widespread financial duress in the populace; such poverty not only keeps labor costs low, but it keeps people locked into using the national currency and thus supports its "value."

This lock-in to the national currency limits freedom and shows yet again that the idea that people are operating in a "free market" is a lie (oops, sorry, it's more polite to call it an *illusion*).

Chapter 26: The Automated Controller, the Mechanizer

It seems to me that the nature of the ultimate revolution with which we are now faced is precisely this: That we are in the process of developing a whole series of techniques which will enable the controlling oligarchy... to get people to love their servitude.

—Aldous Huxley, author of the dystopian novel *Brave New World*, and the utopian novel *Island*, interview at University of California Berkeley (1962)

Can you see what is going on here?

History shows a continuous parade of individuals and small groups wanting to dominate and control everyone else. Some have carried out power grabs for undisguised personal advantage, others claim to be anointed by the divine to rule, others believe they know better than everyone else how society should be run. Almost all of these dominations were/are attained and maintained via military force.

Dominations-by-force have at least three glaring drawbacks:

1. As all empires have demonstrated, controlling populations requires vast energy and resources. The Roman Empire went broke trying to pay its armies, especially pensions to retirees from the army. The history of Europe shows the struggles of many kings trying to raise money from their subjects for their latest adventure in warmongering.
2. Their mechanisms of domination are visible and thus vulnerable to direct resistance.
3. And in a simple action-and-reaction, using force to achieve an aim necessarily creates an equal amount of resistance to that force. That resistance may not manifest immediately, but sooner or later, it does. Poet D.H. Lawrence expressed the essence at the base of it:

The bourgeois produces the Bolshevik, inevitably as every half-truth at length produces the contradiction of itself in the opposite half-truth.

—D.H. Lawrence (1885-1930), from [More Pansies](#), 1932

So what those seeking control came up with is a system designed so that *those who are controlled* provide the energy and resources to maintain the system. That is the nature of the Debt Standard. A small group created a domination mechanism based on something that everyone needs, everyone wants, and most are willing to work hard for (money). So people (and countries) work hard and control themselves in order to “qualify” for loans.

As a major bonus for the controllers, this system carries out its domination undetected by almost everyone. People think, “That’s just the way it is,” so what is there to question, to resist? Especially when most of one’s hours are spent trying to obtain money, who has time to analyze the system, or resist? Welcome to the automated control system in which you live!

Welcome to the automated control system in which you live!

Though many lament a lack of freedom in very specific areas of life, most people consider this to generally be a time of freedom. However, debt-based money implements a pervasive automation of important aspects of both personal and group life that is the antithesis of freedom. Most blame these unwanted impositions on errors by previous governments, decisions by their least favorite political party, or the actions of bad actors, and that now that we can clearly see those errors, we can get the right people into high office, pass a few new laws, and these problems can be solved. But once we are subject to debt-based money, this is not the case. The mechanism is built-in and foundational. Debt-based money creates a *mechanization* of behavior and outcomes, with dire consequences.

Debt-based money is a machine that works night and day to turn you into a machine!

Part 3: The Debt Standard—making Big ever bigger

We see it all around us: Big! Bigger! And even Bigger!

Big Banks, Big Governments, Big Militaries, Big Pharma, Big Tech, Big Ag, ...

This centralization of money and power is an inevitable result under the Debt Standard.

Chapter 27: Debt jubilees, formerly for the poor, are now for large organizations

Question: If debt overload is such a burden on society and guarantees accelerating wealth inequality, why not just have a debt jubilee, that is, an event in which all or selected debt is forgiven?

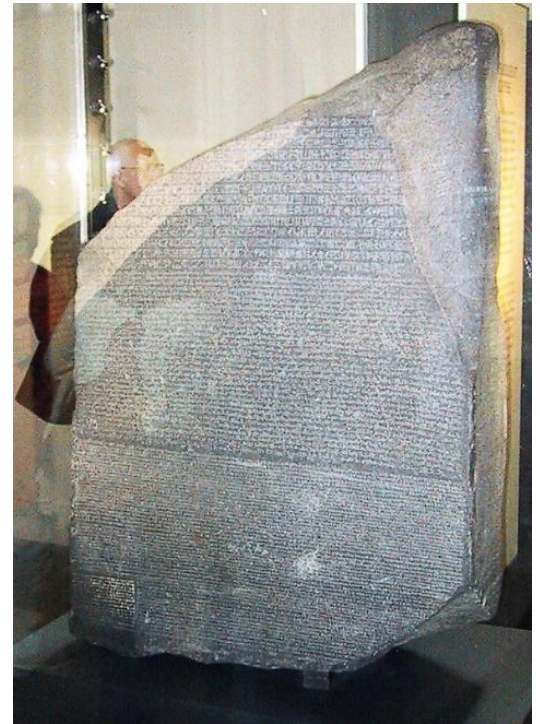
Question: What do the Rosetta Stone, the US Liberty Bell, and first reported public preaching appearance of Jesus have in common?

From David Graeber's book, *Debt: The First 5000 Years* (p. 219):

It's well known that the Rosetta Stone, written both in Greek and Egyptian, proved to be the key that made it possible to translate Egyptian hieroglyphics. Few are aware of what it actually says. The stela was originally raised to announce an **amnesty**, both **for debtors** and for prisoners, declared by Ptolemy V in 196 BC.

As economist Michael Hudson has pointed out, the inscription on the US Liberty Bell is: "Proclaim liberty throughout all the land, and to all the inhabitants thereof." Most assume this quote commemorates the establishment of democracy and the Bill of Rights, and it does. But the Bible quote from Leviticus 25:10 is taken out of context, which is:

Consecrate the fiftieth year and proclaim liberty throughout the land to all its inhabitants. It shall be a jubilee for you; each of you is to return to your family property and to your own clan.
—New International Version



The jubilee was the Biblically-mandated tradition of debt forgiveness every seven years, and the fiftieth year was the "year of the Lord's favor" (Isaiah 61:2) when everyone in debt slavery was freed and lands that had been taken by creditors were returned to their previous owners.

And then in the written report of Jesus' first public preaching, he

unfurled a scroll of the scripture and said he was sent to “proclaim the year of the Lord’s favor” (that fiftieth year of complete debt jubilee referenced in the quote from the *Book of Isaiah* above), freeing the oppressed (Luke 4:18-19).

So it’s clear that debt forgiveness has been an important topic in societies across history.

In the BC era, it was not uncommon to have debt jubilees for the poor. There were *at least thirty* documented episodes of general debt cancellations between 2400BC to 1400BC in the Middle East. These were debt cancellations for the poorest people in society. Commercial debts, and debts of the elites, remained on the books. (For more details, see Michael Hudson’s 2018 book, [*...and forgive them their debts*](#), and *Appendix P: Debt Jubilees, Past and Present*.)

Until the year 10 AD, the Israelites had two levels of debt forgiveness among Jews, one every seven years and the other every 50 years:

At the end of every seven years you shall grant a remission of debts.
—Book of Deuteronomy, 15:1

It was believed then—correctly—that such jubilees restored balance when the proper functioning of the society was threatened by over-indebtedness.

So if societies could manage such jubilees in times that we characterize as more primitive than our own, why can’t we?

Commerce in Babylonian times was denominated in real world goods. Prices were listed as exchange values on thousands of Babylonian tablets, for example: “180 liters of barley were given for one shekel [of silver].”⁵⁷ Debts, according to Michael Hudson,⁵⁸ were mostly arrears that accumulated because someone was unable to pay at the time goods were provided or services rendered. Today we call that “running up a tab.” Debts could generally be settled in weights of barley or silver, by choice of the debtor. The bulk of debts in these agrarian societies were settled “on the threshing room floor,” that is, at harvest time, by delivery of part of that season’s agricultural produce to pay off debts.

A jubilee in those times meant canceling who owed what to whom. But what functioned as money for debt repayment—weights of real goods—remained. The jubilee did not destroy any silver, barley, olive oil, wool, or other tradeable goods from that time, meaning society could continue to function much as before. In fact, that was the idea of pre-Christian debt jubilees: to restore the normal functioning of society when over-indebtedness threatened that functioning.

Modern money is no longer based on real goods, but on debt. As the Bank of England was quoted in [Fact 3](#):

If everyone in the economy were to pool all of their assets and debts together as one, all of the financial assets and liabilities — including money — would cancel out...

⁵⁷ [NakedCapitalism.com](#), [Michael Hudson: Why Failing to Solve Personal Debt and Polarization Will Usher in a New Dark Age](#), Feb-2017

⁵⁸ *Ibid.*

Anyone who has read this far likely now understands: Since our money *is* debt, a jubilee in which debts are canceled also destroys what someone considers to be their money. As we have seen, one party is owed and another owes; if you cancel out the owing, you also cancel out the “owed” part, the expectation of receiving.

Let’s look at a quick example: Let’s say lots of us are angry at bankers, so we decide to forgive all individual bank debt: mortgages, car loans, credit card debt, student loans, and so forth. In the US alone, that would be way more than \$10 Trillion of debt forgiveness. That sounds amazing for people: a terrible burden lifted!

The problem would arise because banks would have lost assets in an amount equal to the debt forgiven. That would mean that banks could no longer meet *their* obligations. So when businesses went to pay their employees, the checks written from their bank account would bounce. When people paid their bills, the checks would bounce. Bank assets support the bank’s ability to pay what they owe; and now they wouldn’t be able to pay much, if anything. So the economy would swiftly come to a grinding halt. Governments would receive little in the way of taxes and would soon find it impossible to distribute benefits, pay employees, and so forth.

So debt-based money makes traditional jubilees impossible, that is, for all bank debt forgiven, that much “money” would disappear.

Legal and political firestorms

Clearly, a general jubilee, or even a selective jubilee with any widespread application—for example, where everyone below a specified income level has part or all of their debts absolved—would face another tremendous hurdle in these times. The jubilees of ancient times were declared by the king, or were commanded from the Bible for Israel, so no one dared challenge such jubilees. But today? Can you imagine the legal and political firestorms that would be generated by a jubilee that benefitted one group and not another?

So how do jubilees for banks and large corporations work?

Still, the chapter heading says that banks and large corporations get jubilees. So how does that work?

It works through the bailout process. When banks grant a large block of loans and borrowers can’t repay, it can cause a bank to collapse, to end up in bankruptcy. But the central banks of each country have decided that large banks are “too big to fail,” that is, the disputable claim is made that it would be devastating for the entire economy were certain banks to fail. For example, Citibank was bailed out in 1920, 1929, 1982, 1991, and 2008.

So behold the modern debt jubilee: Remember when a large group of people could not or would not pay their mortgages in 2008? The central banks created new bank reserves and said to the banks that were failing because of bad mortgages: “We’ll buy those bad mortgages from you for these shiny, new bank reserves.”

Now if you remember from Page 37 on central banks, bank reserves “are just an electronic record of the amount owed by the central bank to each individual bank.” So now, instead of the bank being owed money by over-indebted mortgage holders who were unable or unwilling to pay for their houses, the commercial banks were owed money by the central

bank of the country. Many central banks can print up new money at will so it is assumed that they can always pay their debts. So that's what a modern bank bailout looks like: The authorities supply new, reliable debt to banks in exchange for old, unreliable debt.

No such relief was provided to those millions who were unable or unwilling to pay their mortgage and thus lost their house to foreclosure. So in our modern debt-ridden world, jubilees are not for the poor, as they were in days of old, jubilees are for the world's largest banks and corporations! We'll begin to see why in subsequent chapters.

For those interested, there is more discussion of jubilees, based primarily on the decades-long work of economist Michael Hudson with the scholars involved with the discovery and translation of archeological records of the BC era, in *Appendix P: Debt Jubilees, Past and Present*.

Chapter 28: Domination by banks

I sincerely believe, with you, that banking establishments are more dangerous than standing armies; and that the principle of spending money to be paid by posterity, under the name of funding, is but swindling futurity on a large scale.

—Thomas Jefferson, [Letter to John Taylor](#), 28-May-1816

Our money system: Increasing assets for banks, increasing debt for us

If you do a search on internet for the largest banks in a nation or the world, you will find they are ranked there by assets. Why? Because that's how banks make most of their money: from assets. Our mortgages, credit card debts, business loans, and car loans are *debts* for us, but *assets* for banks, that is, they generate income for banks, and the rest of us pay the bill. The result? Perennial growth of bank assets, perennial growth of humanity's debt burden, and an ever-increasing flow of interest payments from the rest of us to the banks.



Each new bank loan is an additional asset for the bank cartel and an additional debt for humanity.

Thus, banks keep taking a larger “share of the pie,” becoming more influential and dominant (including politically and societally, as we shall see), and humankind's debt burden and subservience to the bank cartel grows accordingly. Repaying all that debt becomes increasingly difficult.

Chapter 29: Theft of community: Domination by banks results in domination by Big

Banks create money out of nothing and thus reshape the economy in their image.
—Prof. Richard Werner, [Shifting from Central Planning to a Decentralised Economy: Do We Need Central Banks?](#), 15-Jan-2017

Question: Why has Big become so dominant?

Money enters our system by borrowing. The cost and availability of that money differs greatly for *Big* than for everyone else, which enables *Big* to dominate.

Cost of money

One way to look at the cost of money is the interest rate for borrowing it. In business, some call this the *cost of capital*.

Big can borrow at very low interest rates. For a number of years, some Big Governments and Big Corporations were able to borrow at negative interest rates.⁵⁹ That means they were able to borrow a 100 Euros today and pay “investors” 99 Euros five years later. In other words, free money! And no, that isn’t the operation of the mythical free market: *Big* was able to borrow at negative interest rates because central banks forced interest rates to be negative. If an economics textbook is ten years older or more, it doesn’t even contain the concept of negative interest rates. That’s a new invention of central banks, desperately trying to bring coherence to a money world made incoherent by the massive overload of ever-expanding debt.

If the comedian Henny Youngman were still with us here, he would call this the “Take my money, please” lending market. Why? Because the lender pays the borrower to borrow some of the lender’s money!

Small, on the other hand, has to pay far higher interest rates. In the US, “37 percent of small businesses say their businesses have relied on credit cards to meet capital needs according to the National Small Business Association.”⁶⁰ In the US, credit card interest rates average between 22.75% (according to the Fed) and 27.89% (according to *Forbes*).⁶¹ In the UK, the average is 35%!⁶² And those are *average* rates, so obviously, for many borrowers, rates are much higher.

In these conditions, how can a small business compete with a large business? If they both want to build a certain type of product, the big company can build a factory for which the

⁵⁹ *Bloomberg News*, [Nestle Brings Negative Yields to Long-Dated Euro Company Bonds](#), 13-Aug-2019

⁶⁰ Governor’s Small Business Handbook, State of Texas, 2015

⁶¹ *Forbes.com*, [What Is The Average Credit Card Interest Rate This Week? March 23, 2024](#)

⁶² *Finder.com*, [What is the average credit card APR in the UK?](#), 19-Feb-2024

interest overhead is perhaps 2%, and for the small company it will be much more. The big company is virtually *guaranteed* to be able to charge a lower price and thus out-compete the small company.

Availability of money

And that's if *Small* can even get that business loan. If they can't, as is very often the case, then they might not be able to build that factory at all. Without access to loans, or from a choice to forgo debt, it is very difficult for some businesses to remain afloat when their competition hyper-accelerates growth by borrowing, especially with free money.

The geopolitical impact

This problem of the cost and availability of money applies to nations as well: Countries with Big economies can borrow as much money as they want at paltry interest rates. That is rarely available for countries with smaller economies. This accelerates the distance between the Big economies and the small, with major wealth, political, and military implications.

Small gets crushed

Small businesses get crushed trying to compete with ever-larger behemoths and to satisfy complex regulations designed for (and all too often *by*) companies that can afford an army of attorneys, accountants, and lobbyists, and whose top executives sometimes take a temporary leave of absence to be the government regulator for their own industry.

When small companies develop innovative ideas, *Big* typically buys them up. Big Tech demonstrates this perfectly. From their founding through the first half of 2020, Google's parent company, Alphabet, had acquired 225 companies;⁶³ Microsoft 216;⁶⁴ and Facebook 80;⁶⁵ creating a new style of monopoly that evades laws against monopolies that were designed for an earlier era. Small companies often have little choice but to take what they are offered by one of the Big companies.⁶⁶

It's even more devastating (for the world) in the energy business. Often we hear about a small company developing some truly innovative energy product; but we rarely hear of that product coming to market. I once worked with a fellow who had been the small business acquisition manager for a global energy giant. He said they bought many of these innovative companies. They would make the founders a little bit rich, promise great manufacturing and global marketing that would make those founders very very rich, and take 51% ownership of

⁶³ *AcquiredBy.co*, [Google Acquisitions](#)

⁶⁴ *AcquiredBy.co*, [Microsoft Acquisitions](#)

⁶⁵ *AcquiredBy.co*, [Facebook Acquisitions](#)

⁶⁶ Names withheld to protect the guilty: I know a person who worked for a successful software startup in the 1980's that was approached by a larger company that you've definitely heard of with an offer to buy them out. The offer went like this: "Take \$5 million for your software company or we will write our own version of your software internally, include it for free as part of our larger software offering, and crush your company." The smaller company did sell out, though for \$2.5 million when the offer was cut in half the day before the contract was signed. There are people who admire such tactics, calling it "playing hardball." But I think it would be more appropriate to call it "bullying for profit," or in a word, *theft*.

the joint venture. Then “culture clash” would destroy the joint venture and the product would never see the light of day. Was that accidental, or was that the plan all along? You make the call. Or ask an energy industry veteran such as George Wentz at [MAD Energy](#).

Who’s the Biggest of the Big?

In terms of the world’s *Big* organizations, of the top 100 organizations in the world in terms of how much money they take in, *only 27 are governments. The rest are corporations.* Large corporations are becoming so dominant that they are not only crushing smaller competitors, they are challenging governments as the most influential organizations on the planet. Of the top 25 revenue-gathering organizations, only 16 are governments. WalMart takes in more money each year than the governments of countries such as Spain, Australia, South Korea, and the Netherlands. 145 national governments (that is, 64% of all countries) don’t even make it into the *top 1000* list revenue-collecting organizations.

Corporate revenues are growing more rapidly than government revenues. If we remain on our current path, corporations will increasingly dominate this list, making it clear why corporations are increasingly able to dominate governments. See *Appendix X: World’s largest money-collecting organizations* for details.

Farming as an example

Big crushing small applies in many fields. How is a small farm supposed to compete with this?



(Source: [blog.spotchemi.com](#), [What are the Hidden Costs of Industrial Agriculture?](#), 25-Apr-2015)

Or this:



(Source: *CivilEats.com*, [Factory Farming Is Sweeping the U.K.](#), 5-Sep-2017)

These Big operations have access to cheap loans for machinery, facilities, seed, feed, and so forth, that drive down the cost of food production making it so difficult for small growers that suicide is now an occupational hazard of being a farmer in several countries. And those who have studied this say that a lot of deadly “farm accidents” are actually suicides as farmers come to believe that they are “worth more” to their family dead than alive because of life insurance policy payouts. This is a great example of the perversion of our language: “worth” only having meaning in terms of money, not in terms of the love and care that family life can create, or the farmer’s love of the land. What do we lose when that love is eliminated by spreadsheets, loan agreements, and insurance policies?

And these industrial farming operations don’t typically grow food, they grow ingredients. 90% of agricultural output in the US is not directly eaten, it’s for ingredients in packaged, well, call it *food* if you like, some of it is. All too often it provides abundant calories and ill health, but little in the way of nutrition.

* * *

In life, *Big* is supposed to support small, not crush it. As science is discovering, the Galactic Center supports our Sun, our Sun supports the Earth, with the Sun and Earth supporting the plant, animal, and human kingdoms. The elders support the community, supporting parents, who support their children. Our debt-based money system perverts what could rightly be called the natural order of things, with *Big* extracting as much as it can from small.

How will these *Big* organizations survive if they continue to crush the people who provide the real value that underpins money? Many are crushing their own customers and employees. How can they think for a second this is a path that works in the long term?

I once asked this type of question of the manager of billions of dollars of bonds for a very large pension fund. Her answer? “That’s not this quarter’s problem.” She explained that money managers are paid to make decisions based only on expected profits and losses in the next few months; they are not paid to take the longer-term picture into account.

The isolation of people and destruction of community

As *Big* organizations—business and government—come to dominate our world, people’s relationships go into vertical silos, that is, their relationships are increasingly with large organizations rather than their fellow human beings. Many people know their neighbors barely at all. “I know him to say ‘Hi’ when I see him.”

[Survey: Average American Hasn’t Made A New Friend — In 5 Years!](#)

[Americans Are Lonely, Miserable, & Depressed](#)

Nearly half of Americans are lonely, according to [a survey of 20,000 people](#) across America by Cigna, which used the well-regarded UCLA Loneliness Scale to measure responses. Indeed 46% said they sometimes or always feel alone and 47% say they sometimes or always feel left out.

For many people, their money comes from a big organization—business or government—rather than via face-to-face interactions with people in their neighborhood, village, or town. They store their money with multi-national banks. They spend their money in “big box” chain stores where employee-customer relations are impersonal, or on-line with no human interaction at all. Their friends are people who approve their posts on Twitter or Facebook. Phone calls are from robotic promoters and survey takers. Many end up dwelling in vertical silos connected not with people but with organizations that are all too happy to be that person’s interface with the world—for a profit, of course. For many, the horizontal world of direct and beautiful and messy relationships with human beings recedes into a disappearing past.

Some people blame this on our attachment, even addiction, to relating to what’s on our electronic screens—televisions, computer, phones—rather than to people, but it seems to me that this diminishes the insight that most of what we take in on those screens comes via *Big* organizations that have more control than we want to admit over what we encounter there. The internet was spectacular in its early years as we heard from hundreds of millions whose voices we had never heard. It still has marvelous examples of what anthropologists call a gift economy, with people giving away knowledge for free. But big governments, big media, big advertisers, big political parties, and so forth, increasingly dominate the internet. Unless we actively counter their efforts, we are dominated by big organizations for what we earn, see, hear, buy, think, and even feel.

Perhaps this helps to explain the rise of inhuman treatment of people by people: these “others” are not real beings; they are names or images on a screen. So our treatment of them matters as much as it matters how we treat a character in a video game. And so many of those games have something to do with killing.

It costs us dearly that we have forgotten to relate with respect for all we encounter. (See *Chapter 4: Respect in Book 2.*)

Centralized money and power, impoverished smaller communities

If money is debt-based, and one group—the largest organizations and the richest families and individuals—has a tremendous advantage over everyone else in terms of access to and cost (interest rate) of money, they accelerate their economic growth at the expense of all other participants in the economy. That is, they can further concentrate both money and power, and so become dominant in the society.

The result? As shown in *Chapter 30: Theft of democracy*, local communities, and individuals who are not mega-rich, have no voice in national political issues. National political decisions—even supra-national decisions in regions like the Eurozone—take little or no account of local needs and wishes.

People send their money to the big financial services companies in the world's money center cities for money management, insurance, credit cards, loans, and so forth, sending the profits from all of those activities to fewer and fewer companies, typically owned by faraway shareholders.

Flows of money to national governments create larger and larger bureaucracies, support staffs, and an army of private contracting firms that feed from government spending, enriching capital cities and the surrounding areas.

All of these growing trends enrich the big organizations, their owners, and the big cities they tend to inhabit, impoverishing local communities as smaller businesses fail, robbing local communities of the production, employment, and money they need to maintain vibrant local economies. If the local area is resource-rich, those resources are typically purchased and owned by large companies from some other place.

Big Money and Big Government organizations sometimes put on a show of resistance to one another's power grabs, but mostly they recognize the money and power commanded by the other group and work *together* for their mutual benefit, often to the detriment of individuals and smaller organizations that have no stake in the games being played.⁶⁷

One of the acute problems of Big Government is the inability of top administrators to understand the impact of their decisions on local communities and individuals. Catherine Austin Fitts, who was the U.S. Deputy Secretary of Housing and Urban Development (HUD) during the 1980's, reports that, even when top administrators are very smart and well-intentioned, their time is consumed with running an organization with thousands of employees and a budget of billions of dollars. They receive voluminous reports. But they don't have visibility into what is happening at the local level, at the people level. When Fitts requested even the *data* about what was happening at the local level with HUD, at first she was denied access to that data! She had to obtain special permission to even *see* that data.

The very rich and the big organizations mostly see, relate to, and compete with each other. Regular people drop from their view and are left to tread water at best, or are overrun by the unintended consequences of policies decided at so-called "higher" levels. People are not stupid, they see what's happening and they are getting angrier by the week. To the surprise and dismay of the elite class, so-called "populism" (both right wing, left wing, and two-

⁶⁷ Some call this a merger of state and corporate power, what the dictator Mussolini defined as true fascism.

winged) is on the rise, and it is used as a derogatory term by those in charge, the defenders of the *status quo*, even though the word *populism* means *of the people*—or at least it used to, in dictionaries. Now it has been redefined to describe specific political movements. This redefinition is not surprising because most of those in charge seem to have lost interest in government of the people, by the people, and for the people. They are interested in government by *them*.

What can I do?

As people rightly say, shop local, buy local, invest local. Know your farmers. Make sure they are growing food in a way that makes you very happy to put it on your table and feed it to those you love. Pioneering organic growers/educators like Lynn Gillespie of [The Living Farm](#) point out that every food dollar a person spends is a political act. It's a vote on what the buyer wants our food system to be. Being conscious about your food spending contributes to determining the nature of the global food system. It's up to us.

The same goes for your other buying decisions. Every time you spend money, you are partnering with the seller. Is the seller someone you want as a partner? Someone whose practices and business model you approve of, that you want to perpetuate?

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seller. Is the seller someone
you want as a partner?
Someone whose business
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As with everything in life, as we become more conscious, we begin to see our part in the creation of this world in which we live.

Growing your own food is one of the great pleasures of life. Most growers love to talk about their methods, so learning is widely available. Anyone with a windowsill can get started (that is, with just a windowsill, you can start with nutritional powerhouses, sprouts and greens). If you have access to any open outdoor space, including paved areas such as decks, patios, or an unused driveway, books and courses from places like [The Living Farm](#) will launch your learning process. Or help out another grower, in their yard, or at a community garden or an *allotment* as they are called in the UK. There is no better way to know how food is supposed to really taste, and no better way known to me to begin to learn about the magnificent brilliance of the nature kingdom which quietly performs feats that would be considered miraculous if people had the slightest inkling of how to actually do perform such marvels. Let's see a corporation or government create a seed from scratch that is as incredible as a tomato seed.

Chapter 30: Theft of democracy

Outraged by the president's strong stand against the steel industry, Henry Luce [publisher of magazines *Time*, *Life*, *Fortune*, etc.] invoked the fate of Julius Caesar in a harsh editorial in *Fortune*, warning JFK that he should 'beware the Ides of March'.

—David Talbot, *The Devil's Chessboard*, 2016

Question: Why do our votes seem to count for so little these days?

We have seen how a debt-based money system inevitably funnels a strong flow of interest payments to banks, their owners, and those at the top of the income pyramid. In a word, it flows to *Big*, enabling them to buy the lion's share of valuable assets on the planet, sending even more money in their direction.

In modern representative democracy, where political success is very expensive, this flow of money allows a small group to commandeer political power, which they use to create laws that further concentrate wealth for them.

Martin Gilens of Princeton University and Benjamin Page of Northwestern University reported on who influenced lawmaking over the last twenty years in the US in their paper *Testing Theories of American Politics: Elites, Interest Groups, and Average Citizens* published by the Cambridge University Press.

Our central finding was this: Economic elites and interest groups can shape U.S. government policy—but Americans who are less well off have essentially no influence over what their government does.

—Gilens and Page, [Critics argued with our analysis of U.S. political inequality. Here are 5 ways they're wrong](#), 23-May-2016

This is their summary from the paper:

The estimated impact of average citizens' preferences drops precipitously, to a non-significant, near-zero level... Not only do ordinary citizens not have uniquely substantial power over policy decisions; they have little or no independent influence on policy at all.

By contrast, economic elites are estimated to have a quite substantial, highly significant, independent impact on policy... economic elites stand out as quite influential—more so than any other set of actors studied here—in the making of U.S. public policy.

Similarly, organized interest groups (all taken together, for now) are found to have substantial independent influence on policy... These results suggest that reality is best captured by mixed theories in which both individual economic elites and

“Our central finding was this: Economic elites and interest groups can shape U.S. government policy—but Americans who are less well off have essentially no influence over what their government does.”

organized interest groups (including corporations, largely owned and controlled by wealthy elites) play a substantial part in affecting public policy, but the general public has little or no independent influence.

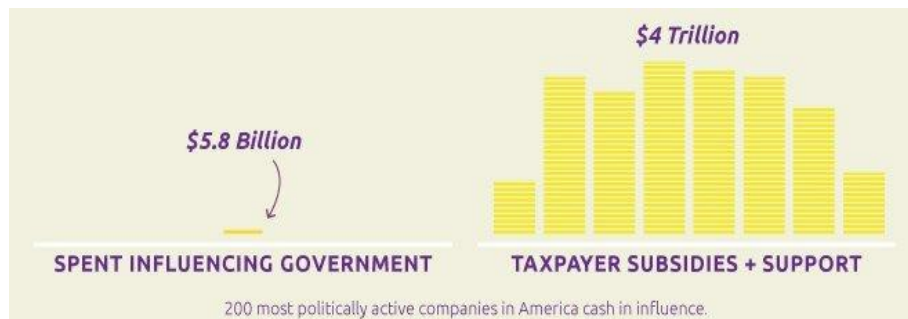
So the maxim “money talks” is true. Economic elites (think billionaires, oligarchs) and large interest groups (especially multi-national corporations, “largely owned and controlled by wealthy elites”) have a great deal of influence on law and policy while the general public’s influence is, according to Gilens and Page, “near-zero.”

Lobbying the government

Most new laws today are written by wealthy organizations. They hire lobbyists to “sell” that new law to one or more legislators who sponsor that bill in the legislature.

The Sunlight Foundation analyzed lobbying expenditures and results in the US:

In the last 5 years alone, the 200 most politically active companies in the US spent \$5.8 billion influencing our government with lobbying and campaign contributions... Those same companies got \$4.4 trillion in taxpayer support — earning a return of 750 times their investment.



Of the 200 companies analyzed, the big banks were *very* well represented: three of the top five spenders were big banks: Goldman Sachs, Bank of America, and JP Morgan. Add in Morgan Stanley and you have four of the top ten; add in Citibank, and you have five of the top fifteen.

Some blame the lack of political influence by the general public on apathy in that group. While there is some legitimacy in that assessment, it is also true that, for those struggling financially, even if they *want* to protest and organize, if they need to spend all of their waking hours simply trying to get food on the table for their family, they don’t have time and resources for political action. And if they do sacrifice their own financial security to take up a political cause, they are up against people and organizations with massive funding. For most people, from experience, they see they have no influence on large government structures and decisions, so putting great effort into political action appears to them as futile.

This all works extremely well for those who have much, far beyond their needs, and who yet seek political influence so they can have even more. They pay lobbyists to write laws, get special riders attached to budget bills, and exert great control over who runs the regulatory agencies that are supposed to regulate them.

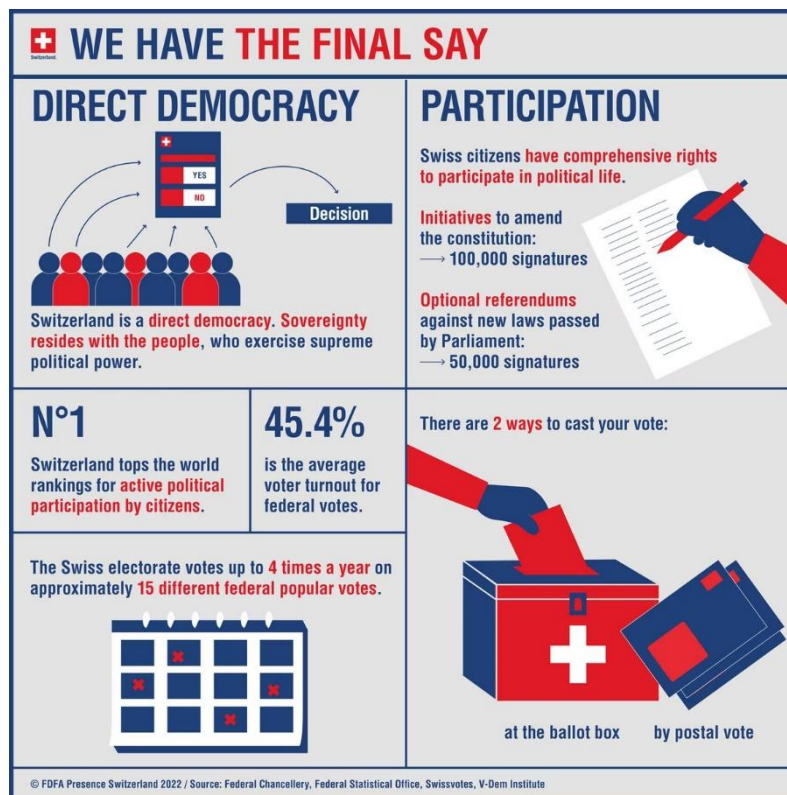
As the great songwriter Stevie Wonder sang in his song *Big Brother*⁶⁸:

You just come to visit me 'round election time.

Direct democracy is a huge step in the right direction

Direct democracy goes a long way toward solving the theft of democracy described above. However, when one brings up the topic of direct democracy with people whose living or self-esteem is tied up with *representative democracy*, one might observe what some call a “freak out” or “melt down.” They huff and puff that direct democracy—in which people vote directly on laws, and even have veto power over laws passed by parliaments—would bring an array of disasters. Perhaps what they don’t know—or what they definitely do not want *you* to know—is that Switzerland was established as a nation by popular vote referendum in 1848, and that the people there have the power to create laws and veto laws at the national, canton (provincial, state), and commune (local, municipal) levels. In Switzerland, the voice of the people is definitely heard. Yet I’ve never heard it described as a “disaster”; quite the contrary. Perhaps it is a “disaster” for the Military Industrial Complex since the Swiss people seem averse to war. (In fact, almost *all* people are averse to war, but their voice does not count when it comes to national decisions about war in countries without direct democracy.)

For more details, see Switzerland’s description of their democracy, [Modern Direct Democracy](#) (2018) or the discussion in *Book 2* under the heading *Direct Democracy*.



⁶⁸ Stevie Wonder, lyrics © Sony/ATV Music Publishing LLC, Warner Chappell Music, Inc., 1972

Rest Stop 5

Surveys show that 100 out of 100 cats don't care about our money system and its consequences. Ask them! You'll see. 😊



(Source: Photograph by Virginia Bates)

Chapter 31: Theft of free markets: When Big writes the laws

Question: Now that Big is dominating the political process, what kinds of laws do they write?

OK, so we appear to be stuck. Those who control society don't want to change anything that reduces their wealth and power. They are more than happy with the debt-based money system. So for now, we are living with domination by Big Banks, Big Corporations, and the very wealthy, what writer John Dos Passos called the Big Money.⁶⁹ And these groups are the ones who get to write the laws.

So what kind of laws do they write? Keep in mind, the original Bank Charter Act, which was a giant step on the road to the dominance of debt-based money, was passed in England in 1844. This move to debt-based money has been building for a long time. But let's look at some of our legal arrangements that assure that the elites will keep increasing their money and status while the rest of us struggle.

Money can roam the world, workers cannot

People with substantial financial accounts can move money around the world with a few clicks on their computer. When workers try to move to another country, they encounter a thicket of immigration rules that either prevent their move or make it *very* difficult. So money can and does go, as Wall Street people like to say, "where it is treated best." *Meanwhile*, almost all workers are stuck in their country of origin.

Corporations can roam the world, workers cannot

Big companies have free rein to expand in or relocate to another country. In fact, they are courted, even bribed, to locate facilities in a new country. Cheaper labor, tax advantages, and less strict regulatory and legal environments are typically the main attractions.

Workers face that daunting thicket of immigration rules when they seek work abroad.

People with substantial assets almost invariably argue for "free markets." One aspect of that is the freedom to move their money and businesses anywhere. But few of those same people favor free markets for workers; in fact, many oppose it with a vehemence that betrays fear. What many actually favor is free markets for owners, closed markets for workers.

So businesses can ditch workers in their source country to lower their labor expenses and boost profits for the owners of the company. This puts downward pressure on wage levels for all workers in that source country, and it reduces tax collections in the source country even as the need for unemployment benefits and worker education rises. This is all justified as benevolent "globalization."

⁶⁹ Read the remarkable, but forgotten by most, USA trilogy by Dos Passos: *The 42nd Parallel* (1930), *1919* (1932) and *The Big Money* (1936).

Perhaps needless to say, money and corporations being free to roam the world while people cannot is yet another booster rocket for wealth inequality.

Wages are taxed immediately and rigorously; money made from money is taxed at reduced rates, radically deferred, or not taxed at all

For workers who receive a paycheck, income and payroll taxes are taken from their paycheck before they can even touch that money. So we can say that employee wages are taxed immediately and rigorously.

The same is not true for investments. For those who inherit or are able to accumulate money, they have a variety of ways to defer or eliminate taxation on money made via money:

- Capital gains are typically taxed at a far lower tax rate—or not at all in some countries—than “regular income,” also known as wages.
- Capital gains on investments can accumulate for decades with no taxes being paid;
- Interest, dividends, and proceeds from investment sales are not taxed immediately, but rather deferred for annual taxation.
- Interest from government-favored bonds can be entirely tax free.
- Taxes are time-deferred in certain annuities, retirement accounts, and master limited partnerships.
- Money can be hidden in tax havens, that is, countries with little or no taxation.

There is a large global industry dedicated to helping those with financial assets avoid and defer taxation. Recent estimates of money stashed in tax haven countries, where taxes are radically reduced or eliminated entirely, range from US\$21 Trillion to US\$50 Trillion.

Warren Buffet, one of the financially richest people in the world, regularly reports that, because of tax rules favoring the rich, he pays tax at a lower rate than his secretary.

Money and corporations being free to roam the world while people cannot is yet another booster rocket for wealth inequality.

Securities laws mean it's easy to invest in large companies, very difficult to invest in small companies

In most countries, if you have some money, it is *very* easy to buy shares of large companies listed on stock exchanges. If you want to invest in a local business whose owners you know and respect, it's very difficult because it is so easy to run afoul of securities laws that are written for large companies with large accounting and legal resources.

So by default, people's money exits their local community and is sent to the big financial centers (Wall Street, the City of London, Tokyo, and so forth) for the enrichment of big financial centers. Small and local are not very important to the Big Banks and Big Government, so anyone who wants to invest locally has to jump through hoops, and very carefully at that. The net result is that ample investments funds are available for large organizations and very little money is available for the small.

Accounting has been perverted from revealing to obscuring

Accounting was invented to make it clear to an organization what money was coming in and what was going out, what they owned and what they owed. But its rules have been perverted to make it possible to obscure rather than reveal.

Organized crime has always been accused of “keeping two sets of books,” one that makes their activities look like legitimate businesses, and one for what's really happening. But that's what almost all big companies do now. They keep one set of books that classifies transactions so that the company doesn't look very profitable, to minimize their tax bill. They keep another set of books re-classifying many transactions so the company looks highly profitable; this second set of books is shown to “investors.”

Accounting rules classify as a loss almost any money flow that does not go to owners

Accounting laws treat the following as expenses, that is, as *losses*:

- Employee salaries and benefits
- Tax payments
- Prevention and remediation of environmental damage

Thus, most companies try to pay employees as little as they dare and to keep headcount—which sounds like a field of cattle—as low as possible.

While most companies seek to make optimal use of resources provided by government (subsidies, infrastructure, legal system, educated workforce, protection services, trade support, and so forth), they work hard to pay little or no taxes (losses), to let others pay the cost of these services. In other words, they work hard to get *something for nothing*.

Damage to nature only shows up in accounting when a company is caught “red handed,” loses subsequent legal cases concerning the damage, and is ordered to perform or pay for some remediation expense. If the loss is considered very large, the company might avoid the payments by declaring bankruptcy.

While the rules say that all of these are losses, it might be more reasonable to see these as wise investments: in people, in nature, in a safe and reliable community and society that provides excellent services, and so forth.

So who has shaped our accounting laws to classify these as something businesses always seek to avoid, namely losses? For whom are they a loss? A brief look at corporate law makes the answer easy.

Corporate law and medieval rules of ownership

If you want a truly insightful view of corporate law, read Marjorie Kelly's *The Divine Right of Capital*. She shows that our corporate laws are designed to replicate the laws that were used to support the privileges of medieval monarchies and aristocracies, in other words *feudalism*, which is part of why some who are honest about our current money system call it *neo-feudalism*.

Why would the wealthy elites work to re-instate such laws? Because with introduction of the Bill of Rights in England in 1689, the French Revolution, and especially the ratification of the US Constitution in 1788, the very wealthy were faced with something new: governance designed to serve many rather than just a few. They needed to counter that emerging force with legal forms *claimed* to support democracy and freedom but which are meant to do the opposite, that is, to *thwart* democracy and freedom.

We are told that, by law, the purpose of the corporation is to “maximize profits for shareholders,” that is, the owners:

...we believe that stockholders are the corporation. When we say that a corporation did well, we mean that its shareholders did well. The company's local community might be devastated by plant closings. Employees might be shouldering a crushing workload. Still we say, “The corporation did well.”

One does not see rising employee income as a measure of corporate success. And this betrays an unconscious bias: that employees are really not part of the corporation. They have no claim on the wealth they create, no say in governance, and no vote for the board of directors. They're not citizens of corporate society, but subjects.

We think of this as the natural law of the markets. It's more accurately the result of the corporate governance structure, which violates market principles. In real markets, everyone scrambles to get what they can, and they keep what they earn. **In the construct of the corporation, one group gets what another earns.**

—Marjorie Kelly, *The Divine Right of Capital: Dethroning the Corporate Aristocracy* (2003), p.3.

The corporate structure is designed to extract value from nature, from employees, from government, and from society for the benefit of owners. Just like the inevitable interest flows from debt-based money, it funnels value and money from those who have less to those who already have more. It is a perfect example of *reaping where one has not sown*.

This was inevitable in a society with banks at its center, with the banks becoming larger and more important every year, and with their favored clients being other large corporations. And “corporate currency” is what commercial banks issue, so it's not surprising that such money benefits corporations over individuals.

For more, see *Appendix S: Corporate law*.



*“Yes, the planet got destroyed.
But for a beautiful moment in time we
created a lot of value for shareholders.”*

(Source: Charles Hugh Smith, *OfTwoMinds.com*, [This Is What Worries Me](#),
and Torb, [Funny Times](#))

Chapter 32: The invasion of the money snatchers⁷⁰

We have all heard the stories of how organized crime dominates an area, making “offers that cannot be refused.” Local businesses will be protected in exchange for “a cut, a taste, a piece of the action.” Authorities—mayors, judges, and so forth—are offered “Silver or lead.”⁷¹ Put less metaphorically, you have a choice: be well paid to do our bidding, or someone else will, after your departure from the physical plane.

The bank cartel is more subtle, but far more effective. They don’t just dominate a neighborhood or city, they dominate nations, even the world.

Bankers fought many battles in their quest to become the premier creators of money. The effort was strongly ramped up in the Twentieth Century, especially from 1913 through 1971. When, in 1971, the US defaulted on its promised backing of the US Dollar with gold, the bankers had won not just another battle, they had won the war: the bank cartel—central banks in concert with commercial banks—was now *the* money creator on the planet.

What a position to have! The banks could now create money at will. Everyone else would still have to scramble for money, including governments, but now they would be scrambling for money created by bankers, and paying bankers for the “privilege” of having some of that money to use—temporarily, of course: most have to keep coming back to the banker’s well over and over again.

Now that bankers had won that war, they could focus their efforts in another way: use their relentlessly increasing wealth to make “campaign contributions” and hire lobbyists to hone national laws so they could get a significant cut of every major money flow on the planet.

If there was a major movement of money, the banks wanted a cut, like the Mob, a “piece of the action.” And where are the big movements of money on the planet? Real estate/construction, transportation, retail, currency exchanges, business purchases, and taxes. The banks set out to get a big cut of all of them, and succeeded.

Real Estate

⁷⁰ Here is my false apology for joking on the title of the movie—*The Invasion of the Body Snatchers*—that must be the all-time movie remake champion. It is an interesting question why that particular movie theme has remained so popular. Does it have to do with the many ways our society engages in identity theft? Not the kind where people steal a bank account, the kind where a person is caused to assume an identity that is far less than who they truly are, an identity that limits them to a very narrow range of behavior? For more detail, see the chapter *What all people have in common: The identity level* in *Book 2*.

⁷¹ Thanks to Tim Crist for reminding me of this succinct form.

Most real estate transactions involve debt that converts a substantial portion of the income of people and businesses to interest payments to banks. Most cannot buy or build a house or factory or office tower using cash.

US banks alone have created a pool of \$17 Trillion⁷² in currently outstanding mortgages from which they collect interest, siphoning a *substantial* portion of the money flow that is people's income into interest payments to banks.

And many have heard of large commercial real estate developer/owners paying little or no income tax despite increasing their "net worth"—calculated in money, of course—by hundreds of \$millions, even \$billions. Yet they do make large interest payments to the banks.

The net effect is that, instead of paying income taxes, real estate developers pay interest to the banks. So the banks are simultaneously taking money from the income flows of developers and the taxes that would have flowed to government, but no longer do.⁷³

And we have seen how debt-based money created by banks must always increase in quantity, necessarily creating price inflation. As property prices rise, the size of mortgage debt rises in tandem.

Transportation

Most vehicle purchases involve debt, turning another portion of the world's income into a stream of interest payments for the banks. Again, price increases for vehicles leads to ever-larger loans.

As a side note, government-underreported price inflation statistics include the ridiculous claim that cars in the US are no more expensive than they were thirty years ago! A colleague of Charles Hugh Smith (*OfTwoMinds.com*), Bill Rice Jr., went to a library in New Jersey to examine ads for the cheapest new car one could buy over a 30-year period⁷⁴. What he found was that, on average, the price for the cheapest cars *tripled* over that time. Yet the US government tortures statistics to make the claim that car prices didn't rise at all. See *Appendix Q: How and why governments understate price inflation*.

Retail: Credit and Debit Cards

Before 1971, when most people shopped, they used cash or checks. Now, most transactions take place using credit and debit cards, and the banking industry gets a cut of those transactions. On a credit card transaction, in addition to banks getting the flow of very high interest rates on credit card debt, the retail shop typically pays between 2.5% to 3% of the size of the transaction to the credit card processing company such as Visa or MasterCard

⁷² [statista.com, Value of mortgage debt outstanding in the United States from 2001 to 1st quarter 2021](https://www.statista.com/statistics/271111/value-of-mortgage-debt-outstanding-in-the-united-states-from-2001-to-1st-quarter-2021/), 12-Jan-2022

⁷³ We will see this dual money-flow capture by banks—interest expense and taxes—repeatedly. It does raise the question: Would governments be so far in debt if the reduction of tax money flow due to interest expenses being deductible did not exist? I don't claim to know the answer because I don't have numbers for this, but it is an interesting question.

⁷⁴ Charles Hugh Smith, *OfTwoMinds.com*, [No Matter How Much Money the Fed Prints, We Still Can't Afford Nice Things](https://www.of-twominds.com/2020/01/15/no-matter-how-much-money-the-fed-prints-we-still-cant-afford-nice-things/), 2020-Jan-15

(both companies were created by banks and were owned by banks for much of their existence until the banks sold some shares of those companies to the public in gargantuan stock offerings). And in the US, the retail shop forks over from \$0.22 to \$0.54 on every debit card transaction. If you think those fees to the retailer don't add up to much, ask business owners.

In the US, to train people to become reliant on credit cards, the banks convinced the US Congress to pass a law that allowed people, up until 1986, to deduct all credit card interest payments from their income for tax purposes. So that took a flow of tax revenue from government and converted it into a profit flow for the banking industry.

And that deductibility plus massive advertising/promotion cemented credit cards as a mainstay of modern commerce. Want the evidence in numbers? According to the Federal Reserve, in 2022, there were 56 billion credit card transactions in the US with a dollar value of \$5.5 Trillion.⁷⁵ So if the transaction fees were 2.5%, that's \$137 Billion for the credit card companies and banks. Quite a gravy train!

Foreign exchange (FOREX)

As anyone who travels to a country that uses a different currency has seen, a "currency exchange" takes a percentage fee for converting one national currency into another (or one's bank will typically levy a percentage fee if one uses a credit card in that area.) Big banks dominate the currency exchange business.

When national currencies lost their anchor to gold in 1971, their prices began to "float" significantly with respect to one another. Millions of traders worldwide try to make a profit off of those price fluctuations. They now trade more than US\$7 Trillion *per day* in national currencies: Euros versus yen, Dollars versus Pesos, and so forth. Thus this FOREX market dwarfs the size of global stock and bond markets. Banks make big profits from this, both as traders and as middlemen taking a cut of many transactions.

These currency price fluctuations can have a major impact on the profits and losses of international businesses. So the big banks offer insurance (protection)—called currency derivatives—against these fluctuations. There are currently \$108 Trillion⁷⁶ outstanding in these currency derivatives, yielding large fees for the banks.

Business debt

The tax-deductibility of interest expenses for businesses encourages the use of debt by business, and of course takes another flow of money from government coffers to bank coffers. In fact, companies borrowing money to buy back shares from the public (in amounts exceeding \$1 Trillion per year just in the US) is a major force in global stock markets, with companies favoring so-called "financial engineering," that is, playing games with money, over enhancing their productive capabilities. Corporate debt is now a significant portion of global debt, generating a massive income stream for those who collect interest, reaping where they have not sown.

⁷⁵ US Federal Reserve, [Report to Congress: Profitability of Credit Card Operations of Depository Institutions, July 2023](#)

⁷⁶ [BIS](#), (Bank for International Settlements)

Almost all of this corporate “financial engineering” is funded by debt. See *Appendix T: Stock buybacks* for the evidence.

Chapter 33: Harvesting the crises: Booms, bubbles, and busts

Question: Is there someone who benefits from these repeating boom-bust cycles in the economy?

When banks create the money supply, this necessarily intensifies the booms and busts of the economy—and yields big profits for the Big Banks

Boom-bust cycles repeating with great regularity were unknown until the very late 1700's. Yes, wars, weather disasters, plagues, and over-indebtedness could always cause economic shocks. But prior to the late 1700's, there's no historical evidence of the type of recurring boom-bust cycles that we live with today.

But if you allow bankers to issue money, intense boom-bust cycles are guaranteed. How so?

Banks grant loans when they are confident that the borrower will repay the loan. When times are good, banks are eager to make new loans since, by their calculations, the more loans they make, the bigger their profits. What most people see is a virtuous cycle: more loans leads to more growth leading to more loans, more growth, and so forth. Confidence dominates, but then leads to overconfidence. Financially speaking, greed is rewarded.

But that party never goes on forever. The boom inevitably leads to over-borrowing, over-capacity, and price bubbles. Some become unable to repay their loans, leading to layoffs, bankruptcies, foreclosures, and so forth. Banks switch from confidence to fear, and curtail loan creation, squeezing the money supply and thus, economic growth. Fear dominates. Financially speaking, fear is rewarded: "They who sell first, sell best" as asset prices plunge or banks fail.

We are dependent on the mood of the bankers for economic growth. Remember we all voted to put private banks in charge of society's economic growth? Ha! Of course no one remembers that because it never happened. This was a structure imposed on people.

Is there someone who benefits from the boom/bust cycle? A paper published by the International Monetary Fund said this:

The second form of usury is the ability of private creators of money to manipulate the money supply to their benefit, by creating an abundance of credit and thus money at times of economic expansion and thus high goods prices, followed by a contraction of credit and thus money at times of economic contraction and thus low goods prices. [There are] numerous ... historical examples where this mechanism was at work. It repeatedly led to systemic borrower defaults, forfeiture of collateral, and therefore the **concentration of wealth in the hands of lenders**.

—Benes and Kumhoff, *The Chicago Plan Revisited*, 2012, International Monetary Fund

So, is this intentional or accidental? The writers of the IMF paper said this:

...it matters little whether this represents deliberate and malicious manipulation, or whether it is an inherent feature of a system based on private money creation.

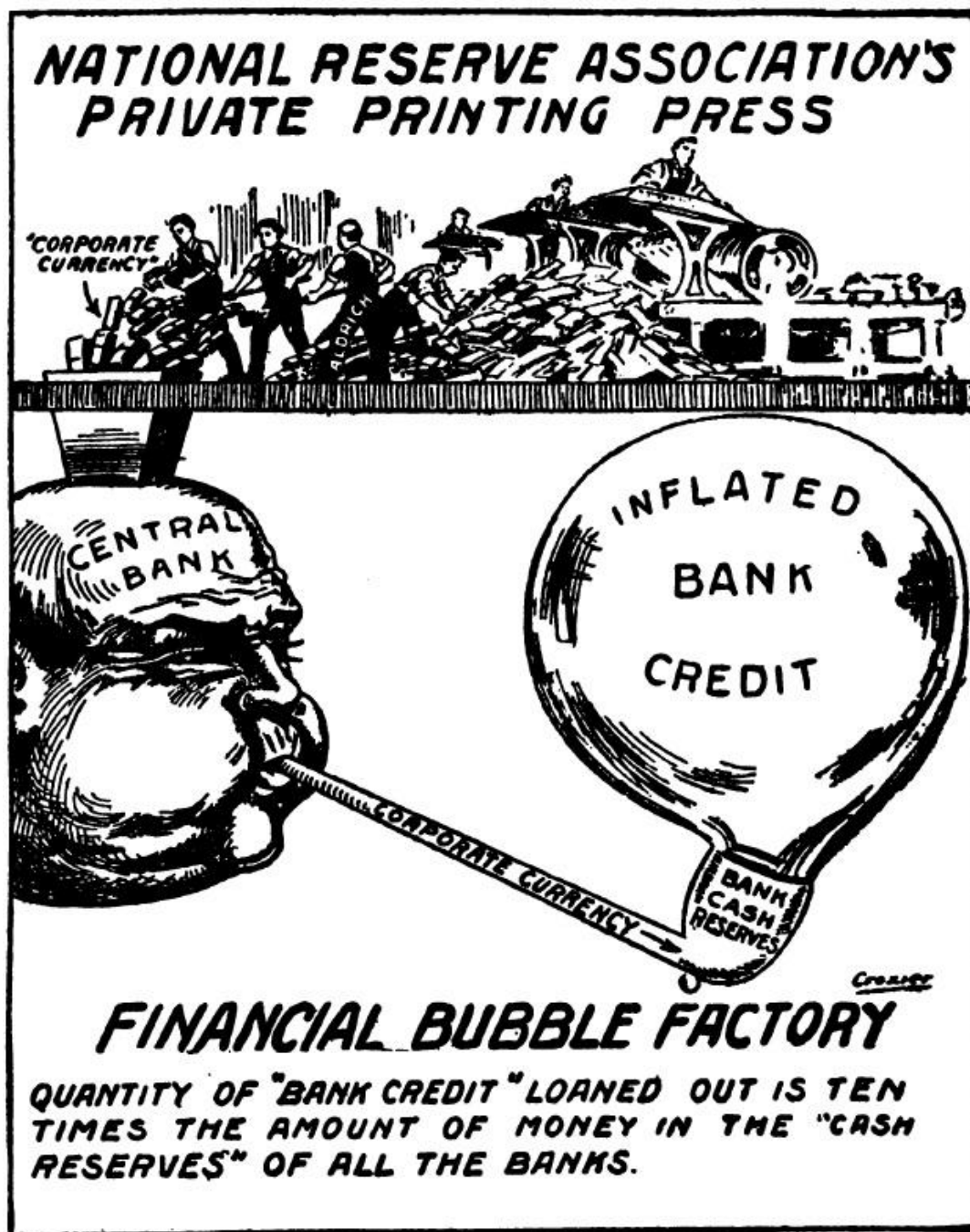
Hmmm. They aren't contrasting whether it's intentional or *accidental*, they are comparing whether it's intentional or an *inherent feature of our money system*. It's quite a stretch to say that a major, repeating feature of our financial system is accidental. It is *structural*, that is, built into the system. This concentration of capital is the system functioning as it is supposed to function, at least from the point of view of its designers.

Some will find that idea difficult to accept. But the evidence is staring us in the face. Money keeps flowing upward from everyone to the small group with a vast ownership position in this system. The system is designed to work this way. To say that it is meeting its design goals is the understatement of the last 100 years.

By seeing who benefits, perhaps now we can understand why crises that are increasing in frequency, intensity, and global reach—in other words, perpetual emergency—are a feature of our money system.

This mechanism is described in more detail in *Appendix U: Who benefits from our repeating boom/bust cycles?*

Here's another drawing from the 1912 book opposing the formation of the Fed, predicting that the bank cartel would create market bubbles:



1912 cartoon by Alfred Owen Crozier predicting market bubbles if the US Congress approved the creation of the US Federal Reserve in 1913, the first step in giving the bank cartel the right to be the sole creator of our money that Crozier called "Corporation Currency." (Source: [U.S. Money vs. Corporation Currency](#), Crozier, 1912)

Chapter 34: Casino economies, Part 1—Individuals

Question: Why are so many people treating our money system like a casino: playing lotteries, day trading stock options and cryptocurrencies, gambling, and so forth?

Many individuals feel forced to enter the speculative casino, trying to get something for nothing, for several reasons, especially:

- People realize that, if they keep their money in cash savings, it constantly loses purchasing power. And in recent years, when central banks pushed interest rates to zero or even negative, people collected no interest from cash savings. So they feel they have no choice but to put their money into markets about which they understand little. Many do a little bit of research and convince themselves that they know a lot, sometimes leading to serious losses of savings.
- Many suffer the consequences of the design of our money system where the rewards for real work are taken by someone else. This leads them to conclude that betting in the speculative casino is the only way they have any chance at all of staying even or getting ahead.
- Many young people have fallen into what some call *financial nihilism*⁷⁷: They are having a hard enough time keeping up with relentlessly rising prices and they see that the prices of real estate and other assets have been bid to the sky, way beyond their means. So they put any money they can get their hands on into super-speculations (meme coins, options on meme stocks, NFTs, and so forth) hoping for that 1,000-to-1 gain that will enable them to actually “get ahead” financially. They see no other way to make anything good out of their financial situation.
- FOMO (Fear of Missing Out): People hear stories (sometimes from their “friends”) that others are making massive speculative gains and it “drives them crazy” that they are missing out on these gains, so they join in on some speculative craze, usually quite late in the game.

The casino is happy that a few succeed in making big speculative profits because it draws in many others. What people forget is that “the house” (Wall Street and its international cronies) makes the rules, and overall, the house always wins. And when “the house” does experience one of its infrequent losses, it gets a bailout.

⁷⁷ *EpsilonTheory.com*, Travis Kling, [Financial nihilism](#), 12-Mar-2024

Chapter 35: Casino economies, Part 2— Productive versus speculative societies

When the bank cartel (commercial banks plus central banks) is the sole creator of what counts as money, a major feature of this system is that bank loans need to be *approved* by banks, meaning that the banks get to decide who gets loans and who doesn't. This has a *tremendous* impact on the nature of society and culture on multiple levels. Activities and clients favored by the banks can obtain copious funding; organizations and projects not favored by the banks are often starved of funds.

It's obvious that some societies are predominantly focused on production and other societies more on speculation, borrowing, and spending. People tend to think that this has to do with culture and work ethic, but it has even more to do with the nature of the banking system in these countries. Before dismissing this idea, there is a prominent example of a country (Japan) that has shifted back and forth in this spectrum over the last 100 years, proving that much of this orientation proceeds from the nature of the banking system and that, in fact, the banking system can, to a non-trivial extent, override the culture.

There is a known method for assuring that a society focuses on production called “window guidance” in which the central bank or the government controls the “lending window” at commercial banks by giving them quotas almost entirely focused on lending to companies involved with the manufacturing and transport of real goods. It is an offshoot of wartime economics applied to peacetime economies. If the country has a reasonable education system, this method can result in what people call *miracle economies*. (As a side note, this tells you that governments know precisely how to create highly productive economies, but many choose not to.)

The central bank of Germany used this method to convert the German economy from a hyperinflationary shambles in the mid-1920s to an industrial powerhouse by the mid-1930s. Japan used window guidance after World War 2 to take Japan from a war-decimated wreck to the second largest economy in the world by the mid-1980s, and then they stopped using window guidance and their economy has floundered ever since.⁷⁸ China uses window guidance today. South Korea, Taiwan, and the other “Asian tigers” have used it.

All of those were or are considered miracle economies. Prosperity improves for almost everyone in the country because this focus on production requires a large number of skilled workers and the widespread distribution of income means that most people can afford to buy what is produced. The wealth of banks and their owners rises at a pace similar to many other participants in the economy as banks earn from very long-term loans geared toward building factories, infrastructure, and houses meant to be lived in, not flipped or “AirBnB’ed.”

Other countries—think the US, UK, France, and so forth—allow their banking systems to allocate loans as the banks see fit, and what they “see fit” for is maximum profit growth that leads to a rising stock price (great for owners and, these days, often the largest part of executive compensation) and large bonuses for the bankers. This means *minimizing* loans to

⁷⁸ Richard A. Werner, *Princes of the Yen*, M. E. Sharpe, 2003

the slow, stodgy world of building new factories and small businesses that increase productive output and employment. They focus far more on lending in the high-turnover, more profitable world of lending for speculation, financial engineering, derivatives⁷⁹, and credit card debt.

It's obvious where this leads. Lending for Merger and Acquisitions says, "Why build a factory when one can simply buy a competitor and lay off a bunch of redundant employees?" Strong lending in the stock and real estate markets creates asset bubbles followed by inevitable crashes. The financial world becomes a casino in which people feel they must participate from FOMO (Fear of Missing Out). People hand over their money to Wall St which takes management fees whether or not they make money for the client. Everything is monetized, including people's cars (think Uber and Lyft) and homes (think AirBnB). People spend increasing time and energy on casino bets and free rides instead of creating real value.

The first approach—a strong focus on productive lending—increases the wealth of almost everyone in the country. The second approach—banks seeking to maximize profits at all costs—leads to sharply increasing wealth for asset owners and the executive class with perhaps a very few drops of their gains "trickling down" to the rest of the populace. Am I claiming here that "window guidance" for lending for productive rather than speculative purposes could give every nation a "miracle economy"? No, because the miracles cited above have all depended on strong exports purchased by countries not so focused on production. This is called the *mercantilist* economic model. But a focus on lending for speculative purposes guarantees that financial wealth for those who already own assets will grow at the expense of everyone else.

Offensive versus defensive uses of debt

As pointed out by writers such as Charles Hugh Smith⁸⁰ and Mike Krieger⁸¹, this high-profit model of banking provides inexpensive and nearly limitless funds to well-heeled asset owners, enabling them to use debt to take advantage of money-making opportunities on a global basis. Thus the richer people use debt—which they can pay back with ease from the proceeds of their activities—for *offensive* purposes, that is, to accelerate their money accumulation. In addition, if the debt can be funneled through a business of the asset owner, then any interest is tax deductible.

The poorer people face declining job opportunities and stagnating or declining wages and seek debt as a defense against ever-rising expenses. They use debt *defensively* in an attempt simply to keep the lifestyle they already have, or to buy necessities. As their debt burden and

⁷⁹ Derivatives are contracts between two or more parties that *derive* their value from the price movement of some underlying asset such as a stock, a bond, a commodity, a currency, and so forth. Typically, one party is betting that the price of the asset will change in some direction, or reach a certain level, by a certain date, and the other party is betting against that scenario. Examples of common derivatives are futures, option, swaps, and forwards.

Derivative contracts have been invented for almost every conceivable financial scenario. With so-called "exotic" derivatives, it can take a 600-page contract to define the terms of the contract. Hundreds of Trillions of US Dollars worth of these derivative contracts exist at any given time, creating a betting casino, run by the elite banks as "the house," that dwarfs the size of the entire global economy. Derivative contracts were at the center of the stock market crash of 1987 and the Great Financial Crisis that started in 2007.

⁸⁰ *OfTwoMinds.com*

⁸¹ *LibertyBlitzkrieg.com*

interest payments grow, even maintaining their current lifestyle becomes more difficult or impossible.

Thus we see that the nature of banking in a country has a huge influence on whether wealth accumulation is widespread or very narrowly focused, and whether an economy is oriented toward productive value creation or a casino mentality highly reliant on debt. According to Prof. Richard Werner in his excellent book *Princes of the Yen*, Japan's banks were run by the high-profit model prior to World War 2, yielding the usual casino economy with vast wealth inequality. They switched to window guidance right after World War 2 until the mid-1980s, enabling an astounding example of a miracle economy that decisively raised the living standard for all Japanese citizens. In the mid-1980s, their central bankers—at the behest of the US—converted the country back to the high-profit banking model, leading first to one of the greatest stock and real estate asset bubbles ever, until 1989, followed by a bubble burst, and then economic doldrums since 1990. They called the 1990's the *Lost Decade*, but it was followed by second *Lost Decade*, and then a third.

Our culture

Writing about our culture reminds me of Gandhi's answer to the question "What do you think of Western civilization?" His answer: "I think it would be a good idea." Culture is marginalized by a debt-saturated, growth-at-any-cost, speculative money system that demands that people run faster and faster to send more and more tribute up the pyramid to the owners of giant banks, corporations, and governments. And if any nation tries to preserve their culture by not becoming an administrative district of the global debt system, the system puts them on the schedule for destruction. The defenders of the *status quo* will come up with derogatory names for such nations, such as the "Axis of Evil," but what they really mean is that these nations refuse to play the banking and debt game pushed by elite banks.

Something for nothing; reaping where one has not sown

These forces combine to turn our economies into casinos in which millions of people spend their life trying to make money faster than those around them, not by providing real value to their fellows, but by making better casino bets.

Reaping where one has not sown has become the guiding principle for many people, consuming most of their time and energy. And the faster they reap, the better they like it, and, for most, the more addicted they become. This waste of brainpower—which could be used to make life better for all of us—is staggering.

As a single example of just how deeply this illusion of *something for nothing* has taken hold, in 2013, two friends created a cryptocurrency called DogeCoin as a parody of Bitcoin. They created DogeCoin as a joke. It was not claimed to have or be connected with any real value of any sort. By May of 2021, the price of each Dogecoin multiplied by the number of digital Dogecoins issued in the world was US **\$88 billion**, "worth" more than the shares of three-quarters of the companies in the S&P 500, the largest 500 public companies in the US. This is yet another example of the word *worth* being tortured into worthlessness.

Reaping where one has not sown has become the guiding principle for many people...

See the chapter *Something for Nothing* in *Book 2* for a more detailed discussion of this plague.

Rest Stop 6

(Source: Photo by the author)



Congratulations! You are now high in the mountains of a true understanding of how our money system, the Debt Standard, functions.

For most (including me), it was an arduous climb. Why? Because so much of what we are told about money and our financial system is either superficial or self-serving rather than revealing. And for many, there seems to be a taboo against looking too closely at the power structures that dominate our society.

You should now be able to go to or print *Appendix Y: Chained Reaction* and read that summary with the background that allows you to readily understand it. This won't make reading that Appendix easy because seeing this whole story at once might stir some emotions. Why do we tolerate such a system? As shown in *Chapter 25: Why do people use their national currency as money?*, we tolerate it because we are given virtually no choice in the matter. *Book 2* has more comments the mental and emotional tactics to which we are subjected so that the Debt Standard seems acceptable and normal.

To follow the ongoing antics of how Big works to keep getting bigger, Matt Stoller covers that topic at [The Big Newsletter](#).

Part 4: Conclusion

Chapter 36: Is *The Great Burning* probable? Inevitable?

Every Roman historian of the time – Livy, Plutarch, Diodorus – they all blamed the fall of the Roman republic on the creditors behavior of assassinating the debtors' leaders, the rule by violence, and the takeover of the economy by creditors after centuries of debt war.

—Michael Hudson, *Michael-Hudson.com*, [The Land Belongs to God](#), 25-Jan-2017

We all know that, in many fields of human endeavor, we are told that our current path is unsustainable. When there are small groups deriving outsized profits from an unsustainable trend, when extreme screaming has replaced political discourse, and when multiple unsustainable trends interact (some call this *polycrisis*), real solutions are very difficult to come by.

Not fear-mongering

Understandably, the notion of financial collapse (the *Great Burning*) is scary, so many people come up with a way to dismiss it without consideration. Calling it *fear-mongering* is one such tactic. My intention here is not to frighten. Consulting Rumi always helps:

Through fear of affliction they all are in the very essence of affliction...

—Rumi, *Mathnawi*, Book 3, Verse 2205

The intention is not to scare, but to say that history shows that we have several trends endangering our current financial system and that being calmly realistic about that, and perhaps doing some planning for it, is prudent:

If matters are hidden and secret at the beginning, the wise man sees at first, while that obstinate one (sees) at last.

—Rumi, *Mathnawi*, Book 3, Verse 2195

Disasters are not what we are told

First, it is important to realize that when we are told that major disasters lead to everyone turning on their fellows, killing their neighbors to feed their family, and so forth, these predictions *are* fear-mongering and have repeatedly been shown to be wrong. When things get truly difficult, most people do what made humans so successful as a species in the first place: They cooperate!

When things get truly difficult, most people do what made humans so successful as a species in the first place: They cooperate!

I recommend the excellent book *A Paradise Built in Hell: The Extraordinary Communities That Arise in Disaster* (2009) by Rebecca Solnit. The book shows—from contemporaneous, on-the-ground accounts—that, in truly major disasters, people *help* one another, pulling together to support their community.

When confronted with the possibility of major societal change, many throw up their hands and say, “What can *I* do about it!” But understanding possible future outcomes from present conditions might lead a person to take measures they consider appropriate. These are personal decisions. *Book 2* offers many possibilities people might pursue, on their own or in concert with others, that can help *whether or not there is collapse*. These are the types of win-win-win-for-all approaches that can move an individual, a group, or even all humankind forward.

If collapse does occur and none of us are educated about what created *this* collapse, we are very likely to rebuild, in fear and haste, the same type of structures that made collapse inevitable.

What is the foundation of this money system?

Anyone who has read this far should be able to “wrap their mind around” the following idea, realizing that it has been very well documented in previous chapters: Since all of what counts as money in the Debt Standard is an asset for one and a liability for another, then, moneywise, the owing/owed relationship is all there is. Our money has no reality beyond that. There’s nothing “underneath” that.

If you “have money,” it means you are owed. What you “have” is being owed, nothing more. When you “spend money,” you pass that “being owed” to someone else. Now they are owed. When your employer pays you a salary, first they are owed, and then they pass some of that “being owed” to you. Now you are owed. By whom? By the bank into which your employer or you deposited your salary. Now the bank owes you.

That’s all our money is: owing and being owed. It’s all debt. That’s what the Debt Standard is: All money is one party owing another party. It never “resolves” beyond that to something more settled, more fundamental.

It used to: Paper money used to resolve to gold or silver, which was possessed by one party. A person who had that gold money was not owed or owing, they possessed that money, the gold, free and clear. Nothing about that was unsettled, nothing was pending, no one was “under the gun” to pay up for the gold or silver to retain value. We now call that the Gold Standard, or at times in history, a Silver Standard.

But now we have the Debt Standard. The bank cartel creates our money by lending. Each loan is an additional instance of owing and owed, creating more debt.

All of us, knowingly or not, are depending on almost everyone else on the planet (or at least in our own country or currency) to pay their debts. Those who are owed expect that they will be paid. If a substantial group of those who owe on their bank loans (mortgages, car loans, business loans, credit card debts, and so forth) are unable or unwilling to pay what they owe, then parties who are owed can no longer expect to be paid. If the owing disappears, so does the being owed. That’s why we keep having more and more bailouts: to make sure that those who are owed are still owed. Otherwise, the money system gets unstable, and can go into reverse, implode, as it started to in 2007. The authorities create bailouts (they create new money, that is, new debt) for select groups so that those select groups are still owed, can still expect to be paid.

If collapse does occur and none of us are educated about what created *this* collapse, we are very likely to rebuild, in fear and haste, the same type of structures that made collapse inevitable.

So this is the foundation of the current global money system. To some (including this author), this seems tenuous at best, and stretched to the breaking point. Others think (or at least pretend publicly) that this foundation is solid. Most people haven't given it much thought at all; they assume that what is true today will be true tomorrow, also known as recency bias. The big question here is this: Will this foundation be able to withstand the threats described below?

The Debt Standard itself is unsustainable

As documented in this book, the Debt Standard is built on simple, unsustainable math: We must always create more money to pay off current loans plus interest, and the only way to create more money is to create more debt ... and on and on it goes to what ... infinity?

The Debt Standard inevitably creates the perpetual financial emergency in which we now find ourselves: our already-overwhelming level of debt must continue to grow more quickly than real economic growth, making more and more debt unpayable. Why must the debt grow more quickly than real economic growth? Because new loans must support not just economic growth, but the repayment of old debts and the payment of ever-increasing interest on our ever-increasing debts. As people say, "something's got to give." This argues strongly for *The Great Burning* being inevitable.

Debt jubilees—used repeatedly in the BC era as a relief-valve for debt buildups that were destabilizing society—are now used almost exclusively for the rich and powerful (we now call them *bailouts*⁸²) for two reasons:

- Those who own this *empire of debt*⁸³ collect most of the interest from the rest of us, and a jubilee for the rest of us that results in them being paid significantly less than they expect is entirely unacceptable to them. The authorities get away with highly selective bailouts to make sure these folks get paid because the authorities claim to be saving the system, many bailouts are carried out in secret, and most people don't understand how they work.
- In the BC era, money was not debt, it was real, so a jubilee (debt forgiveness) did not destroy money. Today, any debt forgiveness or unpayability destroys assets that someone considers to be their "money." If the debt forgiveness were large enough, the money destruction would make other debts unpayable and the domino effect could collapse the entire house of cards.

Many believe politicians telling them that everything is OK with the economy and financial system, but they neglect certain facts, for example:

- The second, third, and fourth largest bank failures in US history occurred in **2023**! If the economy and money system are fine, why would that be the case? The banks

⁸² We call them bailouts instead of jubilees because the latter were debt forgiveness for *borrowers*. Bailouts tend to be for *lenders*. They are not debt forgiveness but rather extraordinary loans or the replacement of unpayable debts on the books of lenders with debts from a central bank or government that are assumed to be payable.

⁸³ The first use of the phrase "empire of debt" of which I am aware was in book titles from Bill Bonner and Addison Wiggins in [2005](#), [2009](#), and [2024](#).

that failed were insolvent. The problem is, so are many other banks in the US and other countries. The footnote has more details on this.⁸⁴

- Most people believe that bailouts by central banks can fix any hole that develops in our money system. But now we have central banks (this happened in 2023 in Sweden, Germany, and the Netherlands) openly talking about possible remedies for their *own* insolvency.

It appears that our system—in which all money is a “promise to pay”—has reached the state described by one of the great writers of all time in one of his novels:

Credit is a system whereby a person who can not pay gets another person who can not pay to guarantee that he can pay.

—Charles Dickens, *Little Dorrit*, 1857

If the one who promises to pay cannot or will not pay, then the promise—what was thought to be money—is an illusion.

It is very important to remember that while a financial system collapse would be extremely disruptive, it would destroy what is ephemeral (our money!), not what is real. Farms, houses, factories, cars, trains, hospitals, bicycles, computers ... the real would still be here, and people would rapidly figure out ways of manufacturing, distributing, obtaining, and exchanging the real in ways that do not depend on the Debt Standard.

Potential financial collapse from the “usual suspects”

The following could lead to large-scale financial collapse. Briefly:

Geopolitics: While hellacious for the people directly involved in humanity’s perpetual regional wars, fortunately, none of those wars have yet erupted into World War 3, which could promptly take down the global economy. How people can consider those who are bandying about threats to use nuclear weapons to be “leaders” is a mystery worth solving. How can someone who is threatening to take humankind backwards, possibly into the stone age or worse, be considered a leader?⁸⁵ Too many governments continue to develop nuclear, biological, space-based, cyber, and other weapons that could cause a planetary financial collapse. How long will people tolerate such primitive behavior from our “statesmen”?

⁸⁴ What stopped the 2023 bank run in the US is that the US Treasury announced that *all* bank deposits are now backed 100% (instead of the old limit of \$250,000 per account). At the time of the announcement, there were \$19 Trillion in deposits in US banks. In 2023, the Treasury collected \$4.4 Trillion in taxes. Backing \$19 Trillion in deposits would likely require the greatest money printing extravaganza ever, creating a lot of new debt for the government. And why did those large US bank failures occur in 2023? Because those failed banks experienced losses on their portfolio of supposedly-safe US government debt! (Most have always called these “risk-free assets,” but that is now shown to be yet another lie, another illusion.) What would it do to the supposed safety of US government debt to, let’s say, another \$10 Trillion to the existing \$34 Trillion in already-existing US government debt? Do you see why people use the word *unsustainable* so often when talking about our money system?

⁸⁵ If you think I’m making this up or that it is limited to “one side” in the superpower standoff, here’s a very small sample of threats made in 2023: [In Stunning Strategy Reversal, Pentagon Will No Longer Rule Out Use Of Nuclear Weapons Against Non-Nuclear Threat](#); [Russian nuclear forces conduct major test](#); [Congressional Commission Urges US To Expand Nuclear Arsenal Amid China, Russia Threat](#).

Countries are engaging in what is called “hybrid warfare” for which weapons are developed on every front that warmongers can imagine:

Overall, 15,000 cyber threats were detected every second ... making Taiwan the most attacked location in Asia-Pacific cyberspace, according to Fortinet, a U.S. cybersecurity firm.⁸⁶

Cyber theft: According to [Statista.com](https://www.statista.com), global losses from cyber theft nearly doubled each year from 2019 to 2022, growing about 80% per year from \$1.2 Trillion in 2019 to \$7.1 Trillion in 2022⁸⁷. If these numbers from *Statista.com* are correct (I have found them to be a reliable source for data), it’s possible that cyber theft could now be more than 10% of the entire global economy. And its growth shows no signs of slowing. The addition of AI tools to the arsenals of attackers could easily accelerate this trend. This is happening despite companies and governments spending hundreds of billions annually to fend off such attacks. At what point does this become widely destabilizing? When it’s 15% of the global economy? 20%? Cities have had their computer systems taken over by cyber-thieves demanding ransom. How long before this happens to countries, or to major banking or financial market networks? And what kind of power is being amassed by those who are stealing these huge sums?

Debtors’ strike: There are movements encouraging debtors to go on strike and refuse to pay some or all types of debt. If such a movement gained a large following, it could blow a very large hole in the debt matrix which our money system is, getting many to understand just how important the *unwilling* part of the phrase “unable or unwilling to pay” is.

Natural disaster: A massive burst of energy from our Sun could fry every digital representation of money in the world.

Rigid rule by small groups always fails

I recently saw an interview with one of the ministers of the government in Singapore. She explained that, in Singapore, the single focus of the government was to make life better for their people. While this should not have been shocking, it was: I have listened to and read many of our so-called leaders and have never ever heard one of them say that their single focus was to make life better for their people. Enmeshed in dualistic thinking, most of our current “leaders” tend to spout division.

Which gets us to the real problem: This planet is—and has been for millennia—plagued by very small groups willing to do anything to gain control of large groups, or even everyone. Once in power, they allow only those changes that grant them *more* power and money, more alleged confirmation that they are better than other people—which, according to them, is why they are rich and powerful. History is filled with examples of societal elites who refused to change, leading to political and economic collapse, revolution, war designed to cover up the failings of the elite, and so forth.

History is so full of examples of such small groups that a case could be made that all major ideologies on this planet have been twisted so that they become justification for a small group lording it over everyone else. The major political, economic, and religious ideologies have succumbed to this. Both capitalism and socialism have been fashioned in our time for

⁸⁶ *zerohedge.com* and the *Epoch Times*, [With Elections Looming, Taiwan Battles Massive Cyber Threat: Cybersecurity Expert](https://www.epochtimes.com/US/2024/01/02/cyber-threat-taiwan/), 2-Jan-2024

⁸⁷ *Statista.com*, [Cybersecurity – Worldwide](https://www.statista.com/chart/100000/estimated-cost-of-cybercrime/), see the graph *Estimated Cost of Cybercrime*.

precisely this outcome: domination by a small group. Many emperors, pharaohs, and monarchs cited religion to justify their power: The “divine rights of kings” to rule, or the claim that they were the one God incarnate. Now some use the mantle of science—which is supposed to be the antidote to dogma—to preach dogma that stretches far beyond what science has actually established.

The problem when small groups gain control is that the vision of a small group is necessarily limited, often by blinders adopted so they can “see” all life through a narrow ideological viewpoint, based on something they consider a universal truth that need not, cannot, must not be questioned—which is why tyrants always seek to crush free speech. When they are able to force structures created from their limited viewpoint on society, entropy promptly steps in and starts degrading their creations because they refuse to adapt those creations to ever-changing conditions and to a wider and deeper understanding of life. They may seem invincible for a time—think of Nazism in Germany, socialism in Russia, monarchy in many nations, or Roman Catholicism in medieval Europe—but the refusal to entertain and implement ideas that fall outside of current dogma dooms their enforcement systems to decay and destruction. Democracy has the potential for great staying power as the open consideration of a wide range of ideas and possibilities can keep society vibrant, adapting to change, and transcending its current situation—as long as people keep respecting the principles on which democracy is founded.

These small groups also fail to account for the fact that the forcing of behaviors that people would not freely choose generates counter-force that, sooner or later, bursts forth in at least an equal and opposite reaction. This is not mysterious. It’s simple action and reaction. When people are forced into behaviors, it creates tension and suffering. Widespread forcing of behaviors might appear to create stability, but only in the short run; in the longer term, it gives rise to the systemic instability that is its own undoing. If such a system of forcing appears stable, one can be sure that the counter-force is biding its time and building energies. As US Pres. John F. Kennedy observed, “Freedom is more enduring than coercion.”⁸⁸

Small, powerful elites seeking total control also ensure their own demise by seeing people’s creativity as dangerous because of its inherent unpredictability, so they squash it. A society without people’s creativity inevitably stagnates and dies. Russia proved this in the 20th Century. China proved it as well: With creativity squashed under Mao, China’s economy was a basket case; once Deng Xiaoping unleashed the creativity of the Chinese people, first in agriculture, then in industry, the increase in China’s prosperity has been astounding.

Those who believe they have found some “universal truth” that need not, cannot, must not be questioned are trapped! More and more brilliant questions are the golden road to positive movement for humankind, as individuals and as groups. *There is always a deeper view. Always.* And one way to arrive at that deeper view is by questioning current views.

If you think it is not currently the case that there are small, powerful groups seeking even more control over everyone else than they already possess, please consider the following cases.

CBDCs (Central Bank Digital Currencies)

The preceding chapters document just how much control the bank cartel has over our world. But guess what. They want more control. Much more. Some of them plan to implement it via CBDCs. This is described by one of its leaders, Agustín Carstens, the Managing Director of

⁸⁸ UN speech, 25-Sep-1961, sourced from [LibQuotes.com](https://www.libquotes.com/quote/un-speech-25-sep-1961)

the BIS (the Bank for International Settlements). The BIS, based in Switzerland, is the central bank for the other major central banks of the world. This is Carstens, pictured below, from this [one-minute video at this link](#).⁸⁹



(Source: [youtube.com](https://www.youtube.com))

They want total visibility of the full details of every financial transaction on the planet, and they want money that is programmable by them. By *programmable* they mean that they will have the ability to prevent the buying of products they do not favor; control from whom you can buy and to whom you can sell; put an expiration date on money so that you must spend it before a certain date; turn off some person or group's ability to pay for anything at all; prevent people from travelling for environmental, medical, or political reasons; impose fines automatically; and so forth.

The most infamous tyrants of the past could not even have dreamed of such control. Even if it were true that the people proposing CBDCs are quite benevolent, how long would it take those with tyrannical aspirations to do whatever it takes to gain control of such a powerful tool? It's obvious how they would treat people who opposed them. Frank Herbert's great quote is worth repeating:

All governments suffer a recurring problem: Power attracts pathological personalities. It is not that power corrupts but that it is magnetic to the corruptible.
—Frank Herbert, author of the *Dune* science fiction series of books, *Chapterhouse: Dune*, 1985

⁸⁹ If you would like some brief, cogent commentary on that video, go to [The Threat of Financial Transaction Control](#), 12-Feb-2024, at [Solari.com](https://solari.com).)

And if you think you are protected by the laws in your area, think again. If these folks have full control of the money, they can control how everyone spends it, thereby overriding local and quite possibly even national laws. Those who oppose them would have the choice: Go along with them, or take opposing action and be entirely cut off from use of money! And probably electronic communications as well, a tactic already used by governments seeking to suppress opposition.

Do I mean that your local banker is seeking tyrannical control? Of course not. I am speaking of a very small group that already has a great deal of power, yet they are not satisfied. They want more. They have already convinced some school systems to teach young children that CBDCs will be great for them. (“They’ll be inclusive!” Right. Everyone will be included so everyone can be controlled.) So the propaganda machine is already in gear. That’s how much power these people already have. Yet for powermongers, what they already have is never enough. I recently heard a great definition of powermongers: Instead of using their power to solve some societal problem, they use their power to get more power.

The Great Taking

As documented in the recent book *The Great Taking* by David Rogers Webb, the uber-wealthy (think those with great multi-generation wealth and power), in concert with some central bankers and powerful politicians, have been implementing legal changes in many countries to establish a new economic regime. They have been working directly on this project since at least 1976, soon after the Debt Standard was fully established in 1971. They own, and thus they are owed on, a great deal of the world’s debt. And they find not being paid by the rest of us completely unacceptable.

What needs to be understood here is that there is a group of already-overly-financially-wealthy people who are trying to make sure that a global financial collapse (that is, *The Great Burning*) will be tremendously *advantageous* to them. They now have an *incentive* for collapse. Some say they will trigger that collapse intentionally. Perhaps they will, I do not know.

Those who dominate our money, political, and legal systems have placed us in a virulent “heads they win, tails we lose” situation. If the current system lasts, they already have sufficient control of the levers of money and power to continue their domination, persistently taking more and more from the rest of us. However, if our current money system collapses, they have devised a way, which they have made legal, to take and own far more of the rest of the valuable assets on the planet.

The “face” of the mongers⁹⁰ is the World Economic Forum that hosts the invite-only annual meeting of the money and power elite at Davos, Switzerland. They have told us that they are working on a new money system for us. They call it *The Great Reset*. What they predict about it is that, by 2030:

“You will own nothing and you will be happy about it.”⁹¹

⁹⁰ Money mongers, power mongers, warmongers, and so forth.

⁹¹ Here is a [link to a video posted by the WEF](#) in 2016 on Twitter that predicts this will be true by 2030. They subsequently deleted the post due to major backlash to this revelation of their plans. In that backlash, there is hope that enough people will provide serious pushback to these plans that such plans cannot succeed.

I'm guessing that you won't be surprised about who will own everything: Yes, it will be the Davos Dung Beetles, who definitely have not understood this:

They who know that enough is enough will always have enough.
—Lao Tsu, *Tao Te Ching*, #46

They claim they will rent us what we need.

[*The Great Taking*](#) is available as a free PDF, or as a printed book; or see [the video](#).



(Klaus Schwab, founder of the World Economic Forum. Yikes! Do you want people like this guy running your world?)

Although David Webb makes a very convincing case from official documents, I am not qualified to say whether or not their legal changes will be effective in the way the “takers” plan. I think the effectiveness likely hinges on how much pushback they get from the rest of the world, and I expect that pushback would be massive, but probably only after they had already shown their hand by a substantial amount of taking, some of which might not be reversible by the time people caught on. But this plan can give anyone a good idea about the latest small, elite group working to gain control over the rest of us.

For those who want my summary of *The Great Taking*, see *Appendix V: The Great Taking*.

Pushback on grabs for greater control

Those who want far greater control over everyone have an insurmountable problem: Enough people on this planet have tasted freedom that anyone seeking to eliminate people's freedom will face a level of pushback that is unimaginable to the aspiring uber-controller.

Which is why would-be super-controllers resort primarily to trickery.

Enough people on this planet have tasted freedom that anyone seeking to eliminate people's freedom will face a level of pushback that is unimaginable to the aspiring uber-controller.

The Debt Standard is based on what is likely the greatest trick ever: the bankers got people to accept that IOUs (debts) are wealth, real wealth:

Everyone got confused that debt is money; when in fact, debt is the inverse of money.

—Raoul Pal, very successful hedge fund manager, retired; hedge fund advisor; and co-founder of RealVision.com

It's obvious that money is now the primary control mechanism on the planet. Almost all governments, many businesses, and many people are in debt over their heads and few on this planet ask why that is the case!

Governments that—as everyone who is honest knows—have been the greatest purveyors of propaganda the world has ever seen are now working hard to maintain their position as the “controllers of the narrative” through censorship. The Chinese Communist Party certainly leads the world in this regard. In the West, governments still have significant control over major media outlets primarily because those are owned by corporations whose interest in preserving the *status quo* aligns with the interests of government. But they want a return to the pre-internet times when it was fairly easy for them to “spike a story” with a few well-placed phone calls to the managing editors of major newspapers and television stations. Now, thanks to whistleblowers and tenacious reporters, stories get out onto the internet despite attempts at suppression. The primary tool for censorship is to label stories and claims as “misinformation” and then to force the companies that own the largest conduits for information on the internet to make sure that as few people as possible hear that story. So we have the propagandists (misinformers) calling other people misinformers and vice versa. Is there misinformation on the internet? Undoubtedly, from both government and private sector sources. Tragically, there are many in our world who believe that “the end justifies the means,” and will carry out an array of nefarious actions (including egregious lying) if they believe it will achieve what they consider to be a noble end. They excuse themselves by labeling their opponents as evil. What this creates, of course, is a world overburdened with nefarious actions (including censorship) by those seeking power over others.

The Debt Standard is based on what is likely the greatest trick ever: the bankers got people to accept that IOUs (debts) are wealth, real wealth.

Expect pushback against censorship to gain momentum.

Food for thought from Copernicus

Let's step back a bit. Copernicus (1473-1543), considered a genius for his pioneering and, at the time, life-threatening work (because dogma of the medieval Roman Catholic Church placed Earth at the center of the universe) in getting Europeans to understand that the Earth orbits the Sun, said that there were four main ways to destroy a country: Dissension, abnormal death rates (due to disease or war), barren soil, and debasement of the currency.

The first three are so obvious that nobody is unaware of their existence. But the fourth, which concerns money, is taken into account by few persons and only the most perspicacious. For it undermines states, not by a single attack all at once, but gradually and in a certain covert manner.

—Nicholas Copernicus, *Monete cudende ratio (Essay on the Coinage of Money)*, 1526

Many countries have three of Copernicus' nation-destroyers currently in play: dissension, soil depletion, and currency depreciation.

Dissension: Rational discourse on many issues has been drowned out by extreme screaming on social media as competing groups work to destroy opponents rather than engaging in the thoughtful discussions and compromise on which a high-functioning democracy depends. The ability to address pressing issues has been crippled as political parties move to uncompromising stances, eroding public confidence in democratic institutions. In non-democratic nations, many disagree with government policy but their dissension is masked (temporarily) by suppression of free speech.

Barren soil: Even beyond desertification, soil exhaustion worldwide has resulted in a situation in which large quantities of fertilizers shipped from distant places is required for much of the world's crop production, putting our food supply at serious risk from fertilizer shortages or supply-line disruptions. Monoculture practices make juicy targets for plant pests, requiring pesticides that kill not only the targeted pest, but beneficial organisms both above and below ground, further damaging soil health.

Debasement of the currency: This book documents how the Debt Standard guarantees currency debasement.

Abnormal death rates?: We hear the beating of war drums in many places. Let us all support the voices for peace before all four of Copernicus' nation-destroyers are widespread.

In any case, it behooves us all to be alert to the national and even civilization-level threats that may be in play before dismissing money system collapse as impossible.

If history proves anything, one thing stands out: Governments, their money systems, and civilizations rise *and* fall.

Objection: "People have been predicting hyperinflation for decades and it hasn't happened."

There is truth in this objection.

If history proves anything, one thing stands out: Governments, their money systems, and civilizations rise *and* fall.

For several decades, some have claimed that “the government” or the central bank has been creating too much money and so a hyperinflationary collapse—where we all need wheelbarrows of money to buy necessities—is imminent.

But our fiat money has differed from many expired fiat currencies. It was not money created primarily by government *printing*, it was money created primarily by bank cartel *lending*. And that is a huge difference.

With money created by lending, the supply of money is ever-increasing, leading to persistent price inflation, but this increase is matched (and eventually exceeded) by the growth of debt.

As the debt grows ever larger, more and more of society’s resources must be dedicated to paying loans plus interest rather than new economic activity. The economic activity generated by the loan is already in the past, and now it’s time to pay up. The economy becomes like a person running through hip-deep water; it gets more and more tiring to keep moving forward until the runner collapses. Or it’s like driving a vehicle while pressing both the gas and brake pedals at the same time.

So the threat to the system so far has not been hyperinflationary, but repeated bouts of inability to pay debts. These have been met with ever-growing bailouts to prevent the burning—the disappearance—of debt-based money that is someone’s asset.

Think of bailouts as someone trying to stuff money into one or more holes that have developed in an ever-expanding dam holding back an ever-growing sea of debt. The dam keeps springing leaks. The holes inevitably develop because some group is unable to keep up with debt repayments, and a bailout is deemed to be required by the authorities.

With bailouts, we continue creating larger and larger amounts of money, a quantity of money that is growing far faster than the real economic activity on which debt repayment depends. So we are losing ground, and losing it with increasing speed.

There is no elegant way out of this predicament. The problem is a design flaw inherent in the Debt Standard. No tweak, no bailout will solve it. The need for continual bailouts is proof of the problem.

Some will argue with this, saying, “My currency has not lost that much value versus the yen or the euro or the dollar or whatever.” There is truth in that because all of these currencies are suffering together from the same problem: They are all losing purchasing power for the real in tandem, some more quickly than others.

So we need to look at national currencies versus the real. If we look at gold, which used to be money, in 1971, a thousand US Dollars could buy about 23 ounces of gold. Now, in early 2024, a thousand US Dollars can buy just under a half ounce. So in 1971, a Dollar could buy *47 times* more gold than it can now. Or it could buy 22 times more crude oil in 1971 than it can now. Or 15 times more *Wonder Bread*. (See *Chapter 1* in *Book 2* for more details.)

Think of bailouts as someone trying to stuff money into one or more holes that have developed in an ever-expanding dam holding back an ever-growing sea of debt. The dam keeps springing leaks.

Of course this is not limited to the US Dollar. In terms of the gold purchasing power of major currencies, the British Pound has lost over 99% of its gold purchasing power since 1971, the currencies that comprise the Euro lost 98.7%, and the Yen lost 96%.⁹² Most people incorrectly see this as prices rising for the real rather than a severe loss of purchasing power of their money.

To say that people's salaries have not risen to match these price increases for real goods is an understatement. Most workers are continually "falling behind" because they keep losing purchasing power for the real. So what do they do to try to maintain their standard of living? Many take on debt.

So the problem here is obvious: People take on more debt. Bailouts create more debt. People demand that government fulfill its promises, and to create new programs, so the governments take on more debt. Governments keep wanting to wage wars, requiring more debt. Few people can buy anything major (houses, cars, and so forth) without taking on debt.

This reality is: Unsustainable!

Either debt will overwhelm us (a deflation, like the Great Depression of the 1930s), or we will create so much new money to try to cover the debt plus interest that we'll finally get that hyperinflation (which is a complete loss of confidence in the currency). Either way, the result is *The Great Burning* of financial assets.

This is an inherent feature, an inevitability, of the Debt Standard. *After the Great Burning*, people will have a *strong and appropriate aversion to financial assets and a high regard for real wealth*.

Since some are likely to misconstrue that last sentence as advice to load up on "real" estate, please allow me to be clear: Prices for real estate are, as this is being written, floating on an ocean of debt. As that ocean of debt evaporates, so will prices for many properties (as we are now seeing with commercial real estate, where a major stake in a Manhattan office tower was just sold for a single Dollar⁹³). Add in rising property taxes as government revenues are squeezed by the *The Great Burning*, and real estate will be more than problematic as an *asset class*. Real estate as somewhere to live that can help to provide community, shelter, food from a garden, and perhaps some renewable energy? Yes, that *is* real wealth, provided its "ownership" does not rely on a mortgage that is a large debt burden. However, if one regards it as a financial asset which can always be sold at a higher price to a "greater fool," that has become a very risky proposition.

This is an inherent feature, an inevitability, of the Debt Standard. *After the Great Burning*, people will have a *strong and appropriate aversion to financial assets and a high regard for real wealth*.

⁹² See Alasdair Macleod, *GoldMoney.com*, [Summary of dangers for 2024](#), 24-Jan-2024

⁹³ *BnnBloomberg.ca*, [Office Tower Deal for \\$1 Reveals Anxiety Among Longtime Buyers](#), 27-Feb-2024

Learning to *value the truly valuable* has always been important. Now it is indispensable.

Books 2 and 3 have detailed discussions of the nature of real wealth, true wealth, and on what must be our new rallying cry: Value the valuable!

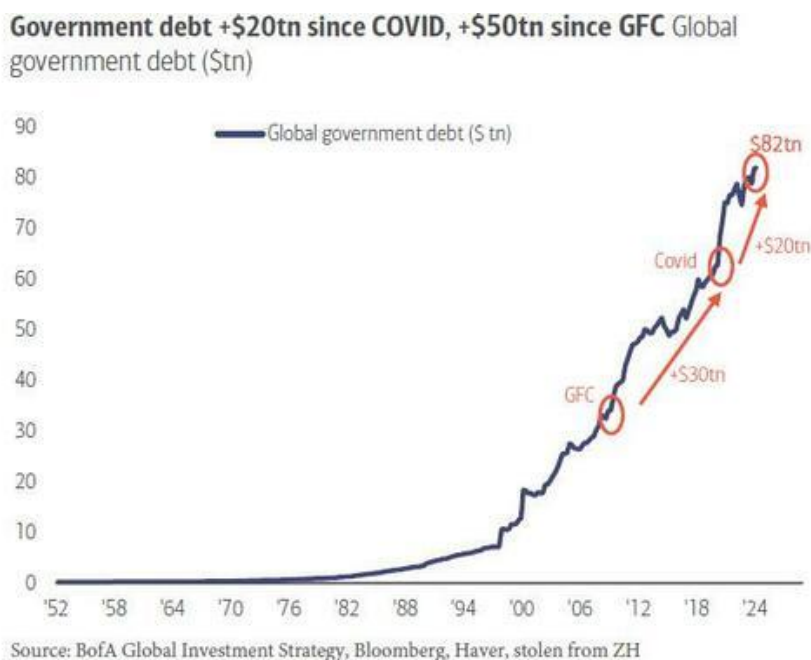
OK, so when?

Learning to *value the truly valuable* has always been important, but now it is indispensable.

People are rightly interested in, if we can expect *The Great Burning*, when will it happen? The truth is that most predictions about major societal events, and particularly their timing, turn out to be wrong. Why? Because they are shaped by the free will choices of millions of people continually reacting to changing conditions. The best we can do is to review history and its cycles, observe current conditions and trends, and do our best to infer probable outcomes.

However, the truth is that *The Great Burning* is already underway. And authorities are not altering their course. They are doubling down on tactics and strategies that brought us to this precipice.

The burning up of financial assets because parties who owe cannot pay now requires nearly-continuous bailouts, in what can rightly be called a *perpetual financial emergency*. For now, to most, this seems like a slow burn. But governments started throwing \$Trillions around like confetti in 2020, bringing the price inflation that any rational person would expect, so we will probably look back and see this as the time the fire really got out of hand. The US government is now borrowing and spending \$1 Trillion more than it collects in taxes *every hundred days* even while claiming that there is no emergency and that the economy is strong. And the US government is not alone: Here's a chart showing that global government debt has increased *seven-fold* just in this century⁹⁴:



⁹⁴ *ZeroHedge.com* and *Bank of America*, [Hartnett: Around The World In Eight Maps](#), 23-Mar-2024

Unsustainable!

Behold *The Great Burning*! But we are talking about the demise of what is unreal. What is real will remain. *The Great Burning* will not destroy farms, silos of wheat, bags of rice, rivers, water wells, forests, gardens, semiconductor fabrication plants, and so forth. But the burning of financial assets will force people to stop gambling and borrowing from their own future, to attend to what is real. After some turbulence, it will lead to a far better world. People will learn, many the hard way, to see the ephemeral for what it is: Ephemeral! Unreal! Perhaps they will once again *value the valuable*.

* * *

As discussed earlier, we are living in what can rightly be called a *perpetual financial emergency*. Stability in the face of increasing turbulence can only last for so long. Either the problems causing the emergency are addressed, or the system unravels.

But it helps to keep in mind that turbulence can hasten the passing of prevailing societal forms that no longer serve humanity well. Many monarchies were replaced by democracies between 1914 and 1946, a period of extreme difficulty that included two World Wars and the Great Depression. Such turbulence can be deeply devastating, but humankind always has the opportunity to make progress—sometimes felt as very slow indeed—toward higher principles. If one stands back and looks at the sweep of history, we often take that opportunity!⁹⁵

I hope that this book has done some serious groundwork by pointing out illusions that impede our individual and societal evolution. *Books 2 and 3* offer ideas on how great progress can and will be accomplished. In my view, they show that financial problems can be vanquished, for the individual, for society, for the world, when and where people choose to do that.

* * *

Know that at some point, when more people realize just who creates our money and how, people will rise up and cry out, from sea to shining sea: “With my work, I give you real value! I give you some of my *life*. I demand real value in return!” As we move through this turbulence, know that your individual move away from the ephemeral and toward the real can help you glide through this period rather than experiencing it only as the School of Hard Knocks. But people do have the free will to choose the School of Hard Knocks.

As people orient toward the real, it will enable us to transcend our current “criminally oppressive”⁹⁶ money system, the Debt Standard.

⁹⁵ One reason for the slow pace of real change is that almost all of us play a part in maintaining this debt pyramid. The [Red Button Story](#) from Catherine Austin Fitts is informative: despite some pervasive evil that people might detect in the system, 99 out of 100 would refuse to push the button that ended that evil if there is a chance it might jeopardize whatever “goodies” they obtain from the system.

⁹⁶ Jeremy B. Rudd, US Federal Reserve, [Why Do We Think That Inflation Expectations Matter for Inflation? \(And Should We?\)](#), Page 1 footnote, 23-Sep-2021

Thank you for your attention to this difficult topic! As a person working to make this world a better place for all of us, you are the hope of the world!

See you at *Books 2 and 3*!

Appendices

In the book, in an attempt to maintain flow for most readers, many discussions of details have been placed in the following appendices for those interested in such details. Some of these discussions are technical, something I tried to avoid, sometimes without success, in the chapters.

Appendix Zero: Bank reserves are also debt

(This Appendix is a continuation of the discussion of central banks and bank reserves in *Chapter 8: Central banks as money creators*.)

There are people who use misinformation about *bank reserves* to sling a great deal of BS about our money system, for example, that central banks create *all* of the money in our system, which any reader of *Chapter 7: The nature of our money and its main source* knows is nonsense.

In the old days, banks had to have a certain amount of gold as reserves in case people wanted to redeem paper banknotes for physical gold; that's where the phrase *bank reserves* originated.

Today, bank reserves are the type of money used when one bank pays another bank or the national government; the electronic transfer of these bank reserves is how they pay one another. Individuals and organizations that are not banks cannot have or use bank reserves; they are used only by banks and the national government. Bank reserves cannot be “lent out” to the public.

Bank reserves cannot be
“lent out” to the public.

So what are bank reserves?

To quote the Bank of England yet again:

Bank of England reserves [bank reserves] are just an electronic record of the amount owed by the central bank to each individual bank.
—Bank of England, [Quarterly Bulletin](#), Q1 2014

From the Bank of England quote, it's clear that bank reserves (“an electronic record of the amount owed”) are debts.

The creation of bank reserves matches up well with the description—given in *Rest Stop 1*—of creation of the public's money:

1. Central banks make loans to commercial banks, which creates bank reserves;
2. The bank reserves circulate among banks and the national government;
3. When a central bank loan is paid off, the bank reserves are destroyed, they disappear.

Just as we can have a bank account with and obtain loans from a commercial bank, commercial banks have an account with, and can obtain loans from, the central bank of their country. The commercial banks post financial assets as collateral in return for a loan of bank reserves into this required account.

Some call bank reserves “base money.” Some bestow almost voodoo-like properties on it, calling it “high-powered money.” But guess what it is. Yep, it’s debt. Just like the public’s money, just like the money in *our* bank accounts, it’s debt, or a debt equation: one party is owed and the other party owes.

So almost all modern money is a record, in a computer system, that some party promises to pay another party. And what will they use to make that payment? The promise-to-pay from yet another party. (An accurate depiction of this system might require a surrealist painter.)

Our money, the public’s money, is loaned into existence by a commercial bank to a person or an organization. *Bank reserves* are loaned into existence by a country’s central bank to a commercial bank. So both types of money are **bank credits**. Our bank credits—our money, the money in our bank accounts—circulate among people, businesses, and local governments as we pay each other. *Banker’s* bank credits—known as bank reserves—circulate among banks and the national government as *they* pay each other.

Banks *must* have a quantity of these bank reserves or they are prevented from participating in their national banking network.

Commercial banks obtain reserves in three ways:

- by posting financial asset collateral—often national government bonds, which are also debts—with the central bank in return for a loan of reserves;
- by receiving payments of reserves from other commercial banks; or,
- by borrowing reserves from other commercial banks.

When Bank A owes money to Bank B, the payment is made via these bank reserves, that is, the computer system of the central bank records that some of the reserves in Bank A’s account need to be moved to Bank B’s account. This is strictly a computer entry; no physical funds actually move between the banks.

Why would such reserves need to move? Let’s say I have a checking account at Bank A and you have a checking account at Bank B. If I write a check to you for £50 and you deposit it at Bank B, Bank B sends an electronic message to the central bank saying that £50 of bank reserves must move from Bank A’s reserve account to Bank B’s reserve account. This is the primary way in which our money is connected with bank reserves; our use of money in our bank accounts often necessitates—because that is the way banks pay each other—the movement of reserves between banks.

In actuality, compared with the amount of money involved in the transactions between banks, the relative change in reserves at Bank A and Bank B is quite small. Think of two banks, each with thousands or millions of customers. Both banks are busy processing loans, checks, credit card and debit card transactions, and so forth. If the payer and receiver of money are both at the same bank, then it causes no movement in reserves. But some transactions necessitate the movement of bank reserves between Bank A and Bank B. Still, reserves are moving in both directions and, in the normal course of business, in total, most of the amounts cancel each other out. In other words, if \$10,000 pesos of bank reserves need to move from Bank A to Bank B, and \$10,000 pesos need to move from Bank B to Bank A, they cancel each other out, that is, there is no change in reserves at either bank. So, at the end of the day, the amount of reserves at each bank is relatively stable because, when all of those thousands or even millions of transactions are aggregated up, summed up, the reserve

balances at each bank change only a little. This is what allows banks to have a far smaller amount of bank reserves than they have customer deposits, loans, and so forth.

Note that all of this money—our bank account money as well as bank reserves—is a set of accounting entries in the software running at commercial and central banks. Every unit of this electronic money is considered an asset, or something they own, by one party; and a liability, or something they owe, by another party.

National governments obtain bank reserves when you and I pay taxes. We write a check to the government, and the government requests a transfer of bank reserves from our commercial bank into its account at the central bank. National governments also obtain bank reserves when they borrow by selling Treasury Bonds to the public. An individual or organization buys the Treasury Bonds from the government, and the government requests that bank reserves be transferred from the commercial bank of the buyer to its reserve account at the nation's central bank.

Where are bank reserves kept? Each commercial bank has an account for its bank reserves at the central bank. So all electronic bank reserves are actually stored *at* the central bank, on *their* computers. The same is true for the national government: Its primary bank account (in the US, for example, that account is called the TGA, Treasury General Account) is stored at the central bank.

So that's the *very* powerful central position occupied by central banks. And it gets even worse.

Bank reserves used to refer to gold and silver in bank vaults that banks needed to have on hand when customers demanded physical coins in exchange for paper currency. The right of people to exchange paper money at a bank for gold or silver coins ended in the 1930s. Now bank reserves are electronic computer entries created by the central bank of each country, and paper money no longer represents precious metals, it represents some of those computer entries at the central bank.

That's quite worth understanding: Banks act like they are guarding something really valuable. Some are built with an imposing edifice with stone columns. The central banks now get to *create* that valuable something—from nothing! Instead of gold and silver in the vault, now the “treasure” banks hold is a set of computer entries, plus a relatively small amount of paper bills and coins that are IOUs. The central banks get to *create* that “wealth” (debt) held as reserves by the commercial banks and the national government.

What about cash?

Where do cash and coin fit in with all of that?

When cash is held by a bank, it is considered part of their bank reserves. When we hold cash and coin, it is considered part of our money, the public's money. As described in [Fact 2](#), cash is a “promise to pay” from the nation's central bank. They owe that promise to whoever holds the cash.

Commercial banks only hold and handle physical cash because their customers demand it. They supply it when we demand that a portion of our deposits be converted from electronic form into paper money. When needed, they request cash—which is normally printed up by

the nation's mint—from the nation's central bank, exchanging electronic bank reserves for physical cash. If they have excess physical cash, they can exchange it back to the central bank for electronic bank reserves.

Many banks—at least those not engaged in money laundering—would be happy to not handle cash at all, which would spare them expenses related to vaults, ATMs, and armored trucks for handling cash. And let's be honest: if you were in the position of the banks and could create electronic money by making loans, and could gain knowledge about your customers by observing their electronic transactions, why would you want to deal with paper money that allows your customers to transact privately, beyond your view?

Banks don't "lend out reserves" to make loans to their customers

Some say that commercial banks need reserves so that they can "lend out those reserves" to make loans to their customers, but this is incorrect. A bank makes a loan, thus creating a deposit—new money—in the account of one of their customers. Sometimes, this customer will spend the deposit and the money will be credited to a customer account at some other bank. This might necessitate the movement of bank reserves to that other bank. If it does, the originating bank will make sure it has the reserves to cover that movement of reserves to the other bank. Banks make loans first, and make sure they have the required bank reserves afterward. As the Vice-President of the European Central Bank, Vítor Constâncio, said in this speech in 2011:

In reality the sequence works ... with banks taking first their credit decisions [author: that is, making loans] and then looking for the necessary funding and reserves of central bank money. As Claudio Borio and Disyatat from the BIS put it: **"In fact, the level of reserves hardly figures in banks' lending decisions.** The amount of credit outstanding is determined by banks' willingness to supply loans, based on perceived risk-return trade-offs and by the demand for those loans."

Banks *can* lend bank reserves that exceed their own immediate requirements to *other banks* who might need those reserves on a short-term basis. There is an active interbank overnight lending market for lending such reserves between banks. But bank reserves are never loaned to people like us, that is, to customers of commercial banks.

Oops! Yet another banking crisis

Central banks used to enforce a reserve requirement on commercial banks, meaning that commercial banks had to keep, for example, an amount of reserves equal to 10% of the value of their customer deposits. But those requirements are now mostly gone. So now, it is up to banks to manage their reserves so that they have sufficient reserves to meet demands from other banks for payment. It was mentioned above that there is an active overnight lending market in which banks lend what they consider excess reserves to other banks in need of more reserves.

However, in the US in September of 2019, before anyone had heard of the SARS Cov2-2019 virus, a crisis developed in an unspecified (unspecified because the Federal Reserve is allowed to keep such things secret) number of banks that provide banking services in the US. One or more banks found they had insufficient reserves and, because other banks were afraid they might not get paid back, other banks were unwilling to lend their excess reserves to the bank or banks with insufficient reserves. In other words, the normally active overnight

lending market seized up. And remember that a bank that cannot pay reserves to other banks to meet legitimate demands for reserve transfers can no longer do any banking business, they can no longer participate in the national banking network, which can be a death knell for any such bank.

So the Fed stepped in to bail out these banks and started lending tens of \$Billions daily into the overnight reserves lending market. Tens of \$Billions soon turned to hundreds of \$Billions, and by June of 2021 turned to more than \$1 Trillion. This banking crisis received near-zero coverage in the press (in large part because the Fed can keep its bailouts secret), and by early 2021 was dwarfed by the noise and multi-\$Trillion money-creation frenzy related to the financial crisis precipitated by Big Virus lockdowns.

Unless our money system gets a radical overhaul, expect more banking crises.

Appendix A: Illusion—“All of our money is created by the government (or its central bank)”

If you believe that government (or its central bank) is the main money creator on the planet, you are in the majority. Surveys show that almost all people believe that their money is created by their government. For many, this is a comforting notion. After all, the thinking goes, the government represents the people and thus creates this money as a service, to make it easy to buy and sell, without which we would be reduced to clumsy barter.

So it's a big surprise for many, *including* most people in government and academia, that most money held by the public is created not by the government or the nation's central bank, but by *commercial*, for-profit banks such as Citibank, Crédit Agricole (France), and the Agricultural Bank of China. (At least that is true in our current money system, called here the Debt Standard.)

A poll of Members of Parliament in the UK showed that 85% of MP's didn't know where our money comes from.⁹⁷

And a detailed survey in Switzerland, *summarized here*,⁹⁸ concluded:

Swiss people have no idea about how Swiss Francs are created... Only 13 percent know that private commercial banks provide the majority of the money in circulation.

If [*Fact 1*](#) in *Chapter 7: The nature of our money and its main source* didn't convince you that for-profit banks create most of the public's money, this is addressed here in two parts:

1. The idea that our physical cash proves that money comes from the government and its central bank.
2. The Eurodollar market, which really “brings down the hammer” on the idea that government or central banks create all of our money. It shows that even *non-US banks* create \$Trillions of US Dollars by making loans.

Getting clear about this is important because there is a vocal group of people who loudly decry central banks for creating all money, all price inflation, and so forth. They believe that destroying the central banks would solve these problems. But they are operating under an illusion. It should be obvious from these books that I am not defending central banks, but solving major societal problems requires excellent understanding of how these problems arise.

⁹⁷ [PositiveMoney.org](#), [Poll Shows 85% Of MP's Don't Know Where Money Comes From](#)

⁹⁸ [PositiveMoney.org](#), [Survey Confirms: People Have No Idea About How Money Is Created](#)

Physical cash

It is likely that some readers, after reading [Facts 1-3](#), are still saying, “Wait a minute. I don’t think this is right about money being created by commercial banks. When I look at our paper money, it doesn’t say that it comes from Wells Fargo, or Barclay’s, or Mitsubishi Bank, it says that it comes from the central bank of the country. And it has a stamp from the Treasury of the national government. So money is created by the government, not by a commercial bank.”



Sure enough, the paper US Dollar says at the very top that it is a “Federal Reserve Note,” and the Federal Reserve is not a commercial bank, but the central bank of the United States, and, while much of the Fed is a set of private corporations owned by commercial banks, its Board of Governors is actually part of the government. (For more information on who owns the Fed, see *Appendix M: Understanding central banks*.) And that round green stamp on the Dollar is the symbol of the US Treasury.

And British Pound notes say they are from the central bank of the UK, the Bank of England, which was founded in 1694 as a private bank but became a formal part of the UK government right after World War 2.

While it is correct that paper currency of most countries is delivered into circulation by that nation’s central bank, two points need to be made:

First, as shown in *Chapter 7: The nature of our money and its main source*, paper currency plays a smaller and smaller role in our world. The Bank of England (BoE) researched this issue for the UK in 2013 and found that less than 3% was in the form of paper currency; the rest, more than 97%, was in the form of electronic deposits, that is, money in bank accounts.

And we all know that more and more financial transactions are being done electronically, so it is very likely that the proportion of electronic money is now even higher than the 97.4% found in BoE research in 2013.

Second, and even more importantly, that 3% of all money in the form of printed cash only circulates because *commercial banks* request physical cash from the central bank. And commercial banks only request this cash because *their* customers demand it. In other words, people like you and me and retail shops demand physical currency. And what do we

exchange to obtain that physical cash? Our bank account money, that is, our electronic deposits, which is created by the commercial banks.

Many banks—namely those that do not profit massively from the laundering of cash from illegal activities—would be quite happy to use electronic money only. Then they would have little or no need for bank vaults, cash-dispensing automated teller machines (ATM’s), armored trucks, and so forth. More profits for them; or at least so they think.

Money Creation Detail

If we want to go into detail about how electronically-stored money—bank account money, or as the banks call them, *customer deposits*—gets created, it looks like this:

Let’s say you want a loan from Bank A and Bank A agrees to lend you the money. Documents are drawn up and you sign a loan agreement (also known to some as a *promissory note*) promising to pay back the money you are borrowing plus interest. The bank employee then makes two entries in the bank’s computer system:

1. They enter the loan an *asset* of the bank, with the details of your signed agreement to make a series of payments to the bank over time.
2. They credit the amount of the loan to your deposit account by increasing the numbers in your account.

That’s it! New money has been created. And no money was subtracted from any other account at the bank to fund that new deposit.

In truth, the money credited to your account is a *liability* of the bank, that is, they *owe* you the money. But this fact is immediately obscured because accounting rules allow the bank and everyone else to call that new money a *customer deposit*. And this new customer deposit is now treated in exactly the same way as a deposit made by another customer who saves up cash over time and then deposits that cash in *their* account. Both are now “customer deposits.” Both are treated equally in every way. *Both are included in the nation’s money supply by all government agencies that track that supply.*

These facts were proven beyond any doubt by Prof. Richard Werner, as described in two outstanding papers that established facts on an empirical basis, that is, from the evidence, not from theory about what is claimed to be happening. In the first paper, *Can banks individually create money out of nothing? — The theories and the empirical evidence* (2014), Werner describes getting a loan from a small German bank and he and the bank employees checked the impact of the loan in reports from the bank’s accounting software. Sure enough, the loan was granted, the new customer deposit was created, and was even transferred to another bank *without any reduction in any other account at the bank*. So new money was clearly created, and even sent to a second bank.

In the second paper, [A lost century in economics: Three theories of banking and the conclusive evidence](#) (2015), the fact of new money creation was again confirmed by the use of bank accounting software in an off-line fashion so that there could be no question that any other transaction had interfered with the test.

Money spending detail

“Ah,” you say, “Sure, but what about when I spend that money? What happens then?”

If you spend the entire amount—which people often do with loans when they purchase, for example, an automobile—then the entire amount ends up as a customer deposit in the account of the automobile dealer. If the automobile dealer’s account is also at Bank A, then the bank would do a simple computer entry that switches the customer deposit from you to the automobile dealer. Bank A now owes the automobile dealer instead of you.

If the automobile dealer’s account is at a different bank, Bank B, then Bank A now owes the money to Bank B instead of to you. Their liability has switched from you to Bank B and its customer.

In this case, it gets slightly more complicated. But just slightly. Banks pay each other with a form of money called *bank reserves*. If you wish to know the nature of bank reserves and how they function, please see *Appendix Zero: Bank reserves are also debt*.

What this shows and means is that the creation of the *public’s* money relies on the decisions of *private* bankers working at UBS, HSBC, JP Morgan Chase, and so forth. They determine how much money gets created and to whom it is allocated. And these are *for-profit* banks. Most money is not created by some supposedly-neutral government authority, it is created by private corporations where only the largest shareholders and top executives are afforded an effective voice in the governance of the company. It is wise to keep that phrase *corporate currency* in mind when thinking about the true nature of our money.

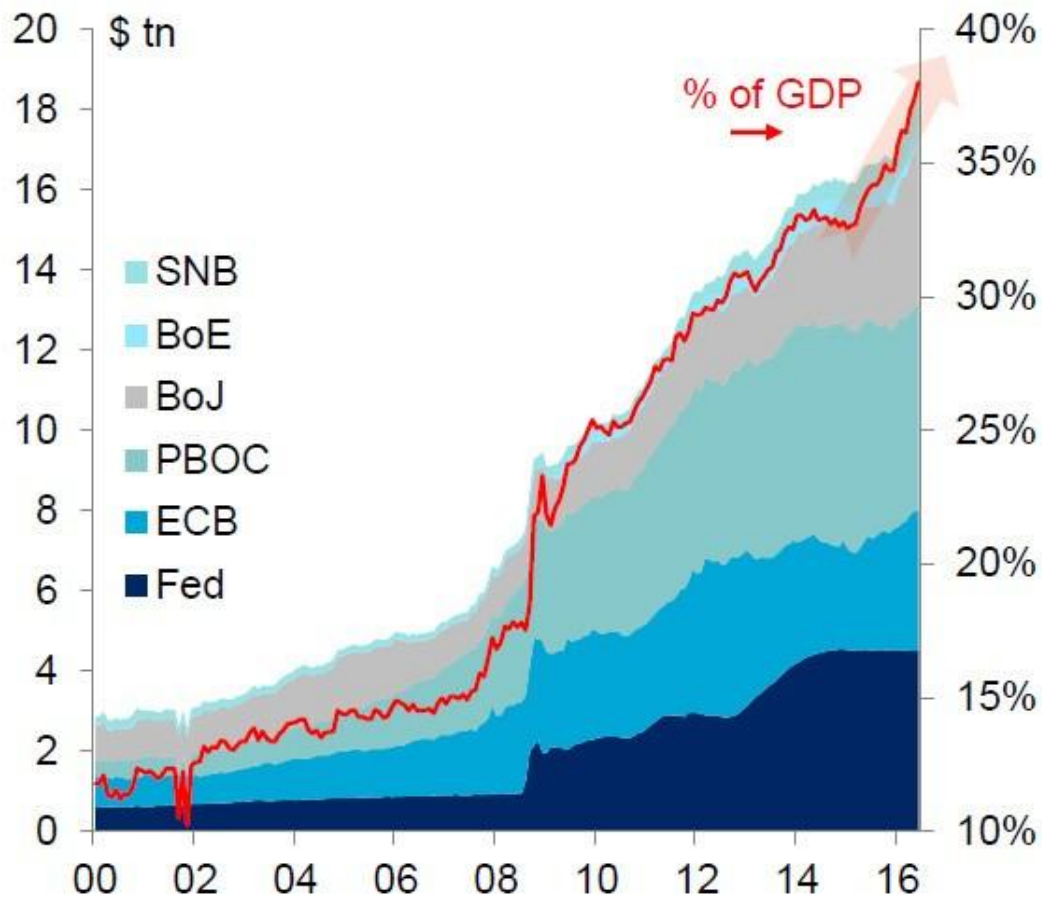
Central banks

Let’s clarify one more issue: National and supra-national central banks, such as the US Federal Reserve, the European Central Bank, and the Bank of Japan, can and do create money from nothing. They have been especially active in this regard since the financial crisis that started in 2007-2009. (See *Appendix L: Quantitative Easing* for more details.) In recent years, the Swiss National Bank, for example, has been creating Swiss Francs from nothing, selling some of those Francs for US dollars, and then buying the stock of Apple Computer and other US companies. By late 2019, they had purchased US\$100 Billion of stocks this way.⁹⁹ The dollar value of stocks purchased by the Bank of Japan is far higher. Here is a chart showing that the six largest central banks created about US\$18 Trillion from nothing over 16 years:

⁹⁹ [swfinstitute.org, Swiss National Bank Almost Owns \\$100 Billion Worth of U.S. Stocks](https://swfinstitute.org/swiss-national-bank-almost-owns-100-billion-worth-of-u-s-stocks/), 13-Nov-2019

More and more and more!

Aggregate balance sheet of large central banks, \$tn & % of GDP



Source: Citi Research, Haver.

(SNB=Swiss National Bank; BoE=Bank of England; BoJ=Bank of Japan; PBOC=People's Bank of China; ECB=European Central Bank; Fed=US Federal Reserve)

So central banks appear to be able to create nearly unlimited amounts of electronic money. And as stated earlier, central banks issue physical cash into circulation, but only on request from commercial banks.

But in terms of money used by the public every day, the amounts central banks have created is still less than the amount of money created by commercial banks through lending. Here are the relative amounts of cash, bank reserves (created by the central bank), and bank deposits (created by commercial banks) in the UK as of 2022:



(Source: Bank of England, [How is money created?](#))

So, as of 2022, the ratio of deposits to reserves was 4.3 to 1. It is worth noting that, before the financial crisis of 2007-2009, that ratio was 80 to 1! That is, before the crisis, central banks created almost none of the money supply; almost all of it, 80 times more, was created by commercial banks!

Eurodollars

Most people who *do* think about money creation believe that US institutions create US Dollars, Mexican institutions create Mexican Pesos, and so forth. And they do. But especially in the case of the US Dollar, because demand for the Dollar is so widespread globally for international trade and for speculative currency trading, it turns out that, in terms of actual loans, commercial banks *outside* of the US create more US Dollars than banks *inside* the US! And these banks are “foreign” as far as US authorities are concerned, that is, they are not regulated by any US authority. How do non-US banks create these US Dollars? How else in this money system—by making loans that create the money they are lending!

...it turns out that commercial banks *outside* of the US create more US Dollars than banks *inside* the US!

As of June, 2022,¹⁰⁰ US banks had \$11 Trillion in loans outstanding. Non-US banks had \$15 Trillion in *US Dollar* loans outstanding (that’s in addition to the loans they made in their own national currencies). So banks that are *not* US institutions made loans to create \$4 Trillion more US Dollars than US banks!

So banks that are *not* US institutions made loans to create \$4 Trillion more US Dollars than US banks!

Market participants call these international Dollars *Eurodollars*. They are not to be confused with Euros, the currency of the European Union. These Dollars are called *Eurodollars* because it was European banks that first started creating these Dollars in the 1950’s and 1960’s by making US Dollar loans to their customers.¹⁰¹ Now banks in Asia, the Middle East, and elsewhere do the same. And it isn’t

¹⁰⁰ US statistics are from the [FRED database](#) of the US Federal Reserve. Statistics for institutions outside the US are from the BIS (Bank for International Settlements), the world’s “central bank for central banks,” [Quarterly Review, December 2022](#).

¹⁰¹ Once the European banks started creating tens of billions of US Dollars, the Fed hired famous economist Milton Friedman to investigate. He informed the Fed that these

just commercial banks. Pension funds, insurance companies, and hedge funds are also involved.

In fact, no regulators from *any* country have control over the Eurodollar system. It is self-organizing and self-regulating. Much of it operates in the shadows. An institution is allowed to participate either because they are willing to post collateral for a loan or they are trusted by some other participant. As expert Jeff Snider says, many transactions happen on a “we know you’re good for it” basis.

How big is the entire Eurodollar market? Because much of it operates in the shadows, no one knows for sure. The BIS (Bank for International Settlements), has been trying for several years to understand and quantify the Eurodollar system. In 2016, they found \$17 Trillion in what they called at the time “footnote money” because it was not reflected in the financial statements of non-US banks except in the footnotes to those financial statements. Such footnotes are literally in “fine print.” A peak into the shadows.

When the BIS totaled up all of the US Dollar debt obligations created by non-US financial institutions that they could find, it was *\$92 Trillion* of US debt! This market is so active that the BIS also noted: “The churn of deals approached \$5 trillion per day in April 2022...”¹⁰²

\$92 Trillion is almost the size of the entire global economy for a year. And to repeat, the US Federal Reserve has no authority over this market; and it is likely larger than \$92 Trillion. However, as is so often true in our world today, when significant players in this market are suddenly unable to pay their US Dollar debts, they report their problem to their own nation’s central bank, and the US Fed then often provides a bailout through what are called “currency swap lines” with the foreign central bank that needs US Dollars to bail out commercial banks in its own jurisdiction. The excuse is, as always, that they are “saving the system.”

There are two major points here:

1. When you hear someone claim that the US government or US Federal Reserve creates *all* US Dollars, you can now be sure that, to put it as nicely as possible, they haven’t sufficiently researched the topic. *Commercial banks* (US and non-US) create tens of \$Trillions by making loans.
2. No one knows just how big the Eurodollar system is.

If you want to become educated about Eurodollars, you need to consult with Jeffrey Snider. Jeff created the [Eurodollar University](#) to educate us about it. This study is a deep dive, and not a “one-off” stop because the Eurodollar market is complex and constantly evolving.

Eurodollars were “fountain pen money” created by non-US bankers making loans in US Dollars.

¹⁰² BIS (Bank for International Settlements) [Quarterly Review, December 2022](#).

Appendix B: Illusion—“Banks don’t create money, they are intermediaries between savers and borrowers”

Some economic “authorities” like to say—and have been saying for 100 years—that banks don’t create money, rather they are merely intermediaries between savers and borrowers, collecting deposits from savers and lending those deposits to borrowers. Here is an example from a popular on-line business course:

Banks are a financial intermediary—that is, an institution that operates between a saver who deposits money in a bank and a borrower who receives a loan from that bank. All the funds deposited are mingled in one big pool, which is then loaned out. —*Lumen Learning: [Banks As Financial Intermediaries](#)*, Ivy Tech Introduction to Business.

However, even the central bank of the UK, the Bank of England, makes it clear that this is false:

Bank deposits are simply a record of how much the bank itself owes its customers. So they are a *liability* of the bank, **not an asset that could be lent out**. [Underlining by the author.]
—Bank of England, *[Quarterly Bulletin](#)*, Q1 2014

And from that same paper:

The reality of how money is created today differs from the description found in some economics textbooks: Rather than banks receiving deposits when households save and then lending them out, bank lending **creates** deposits. . . . Whenever a bank makes a loan, it simultaneously creates a matching deposit in the borrower’s bank account, thereby creating new money.
—Bank of England, *[Quarterly Bulletin](#)*, Q1 2014

Joseph Schumpeter—the economist credited with coining the famous phrase “creative destruction” for the phenomenon in capitalism where innovative companies replace obsolete companies—once wrote:

It is much more realistic to say that the banks "create credit," that is, that they **create deposits** in their act of lending than to say that they lend the deposits that have been entrusted to them.
—Joseph Schumpeter, *History of Economic Analysis* (1954) page 1114.

And in *[Fact 1](#)*, we heard from a commercial banker saying that banks “don’t need to wait for any deposits because, when they make a loan, they create the deposit, right there.”

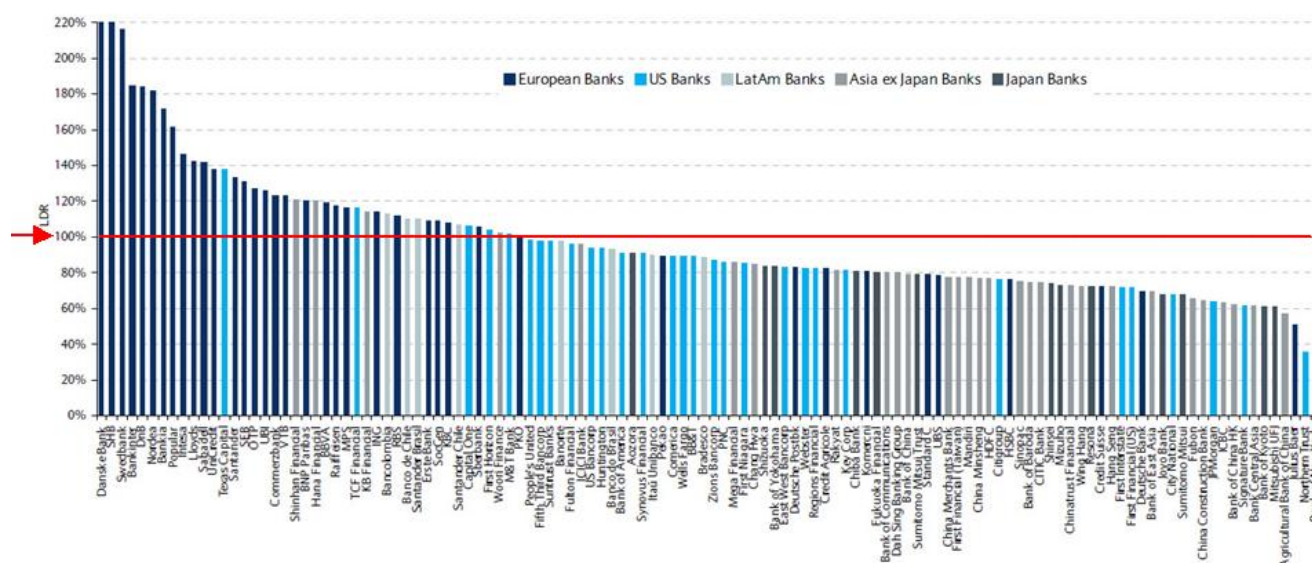
The chart below *disproves* the quite prevalent idea that banks can only make loans by lending out the money deposited by bank customers. It shows that 42 prominent banks from

21 countries on four continents granted more loans than they have deposits. A few even have lent out twice as much as they have in deposits. If banks strictly lent out deposits from savers to borrowers, that would be impossible.

The chart shows the loan-to-deposit ratio for 120 of the largest banks in the world. If banks can lend out only what has been deposited, then no bank would have a ratio greater than 100%. A ratio greater than 100% means that the bank lent out more money than it has in deposits.

In the chart, the loan-to-deposit ratio is shown on the left hand scale. The bank names are shown along the bottom. The 100% “red line” is shown by a major arrow on the left and a red line across the chart. Any bar above the red line represents a major bank that lent out more than it had in deposits. And the chart was created by a large bank, Barclay’s, not by some anti-bank activist:

Figure 19: Loan-to-deposit ratios – global banks, FY 2011



Source: Company reports, Barclays Capital

The first three banks, on the left—DanskeBank, SHB, and Swedbank—had ratios near 220%, meaning that they had lent out *more than twice* what they had on hand in customer deposits.

The 42 banks with a bar above the red line are from 21 different countries on four continents, so this is a global—not a national or regional—phenomenon.¹⁰³

Most money in our modern world is created by commercial banks, not governments. The commercial banks, by deciding how much money they want to lend, have more control than anyone over the quantity of money that exists in an economy, and who gets that money. No

¹⁰³ The 42 banks with loan-to-deposit ratios above 100% from the Barclay’s chart are from these 21 countries: Argentina, Austria, Belgium, Chile, Columbia, Denmark, France, Germany, Hungary, India, Italy, Netherlands, Norway, Poland, Russia, Saudi Arabia, South Korea, Spain, Sweden, UK, and USA.

one ever voted to put commercial banks in charge of the supply and allocation of money and credit in our societies, but that is the way it is. It is a major part of the *structure* of our global economy.

Here is an example of just how deep this “rabbit hole” goes: In 2008, when many banks needed to be bailed out or they would have failed, Credit Suisse (which ultimately failed in 2022) needed £7 billion in new capital. So what Credit Suisse did was “lent” £7 billion in newly-created money to some Gulf investors, crediting the account of these Gulf investors with the new £7 billion. Then Credit Suisse issued some new shares of stock and sold those shares to the Gulf investors for £7 billion, and thus ended up pocketing the £7 billion that was invented via the loan. They also ended up with an asset that said these Gulf investors owed them £7 billion. According to Prof. Richard Werner in his paper *A lost century in economics: Three theories of banking and the conclusive evidence* (2015), this transaction was “allegedly also involving an upfront 'fee' paid to Qatar of £322m, which could be a refund of the interest on the loan...”

Werner also stated that while Credit Suisse publicly disclosed what they did, other banks did the same without much, if any, disclosure:

According to analysts at Italian bank Mediobanca, such bank loans to new bank share investors were a “fairly common practice... during the crisis”, whereby **Credit Suisse may have been unusual in disclosing this** and obtaining regulatory approval. Either way, banks in this way created their own capital out of nothing...

While it is true that banks play a role as intermediaries, it is also true that they create new money.

Appendix C: Illusion—“Money is created by the money multiplier effect”

Many have an outdated view of how the banking system functions and say that our banking system is a *fractional reserve banking system* and therefore it creates money as follows:

1. Bank A receives a deposit of \$1,000, is required to keep 10% in reserve, and lends out the rest, which is \$900.
2. That \$900 gets deposited in Bank B, which keeps 10% in reserve and lends out the rest: \$810.
3. That \$810 gets deposited in Bank C, which keeps 10% in reserve and lends out the rest: \$729

and so forth until, after a total of 30 iterations, that original \$1,000 is now more than \$9,600. The people promoting this view say that this is how the money supply expands to massive quantities, causing devaluation of the currency and price inflation.

The origin of that first \$1,000 is never clearly specified, but it is assumed to exist, and then the next \$8,600 is levered up on top of it. This view likely stems from the time when banks held gold and silver in reserve and were allowed by their central bank to make loans that exceeded the amount of precious metals the bank held in reserve, thus the term *fractional reserve*.

But as shown in the *Facts*, banks don’t wait for deposits to arrive and then make loans, they *create* deposits by making loans. There are two ways to verify that this model prevails and that the money multiplier explanation does not:

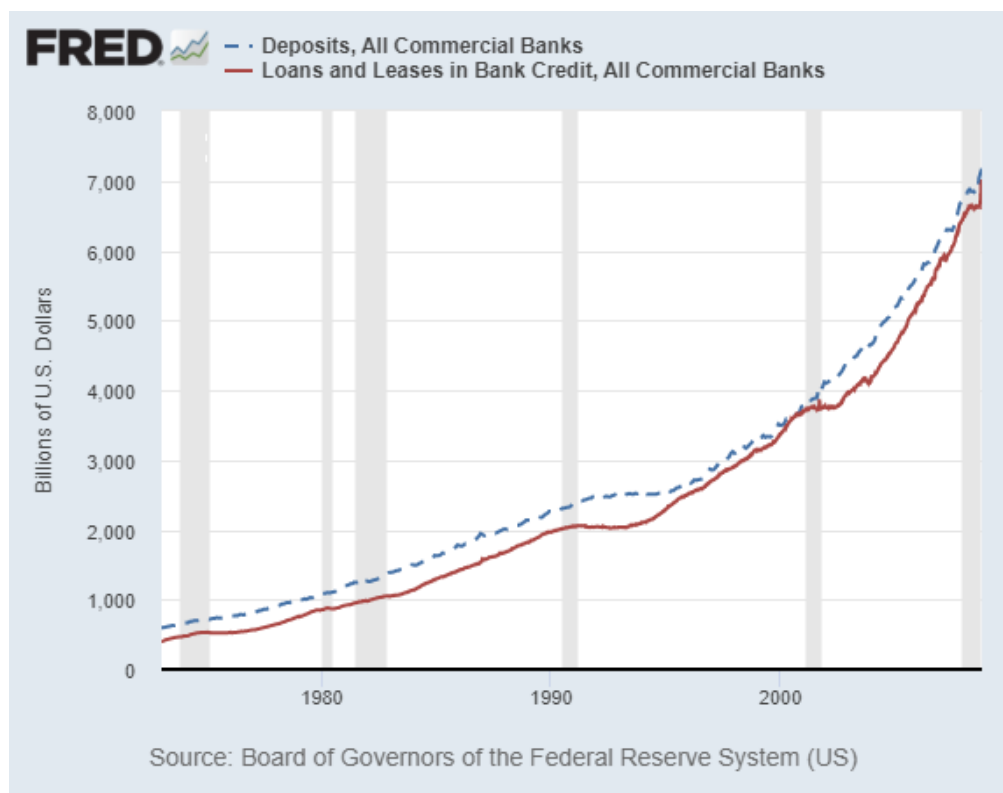
First, look up the Loan-to-Deposit ratio of any commercial bank. If the money multiplier model were correct, one would expect to find more, probably a lot more, Loans than Deposits in many banks. Even a fairly conservative bank might have five times as many loans as deposits. But you will never find anything close to that.

This *Forbes* article¹⁰⁴ shows that, in 2018, the largest five US banks combined had \$71 in loans outstanding for every \$100 in deposits. So instead of loans being five to nine times *greater* than deposits, they were actually 0.71 times deposits, that is, at these big banks, there were *fewer* loans than deposits. These ratios have become even lower in subsequent years. By 2021, JP Morgan Chase had *twice* as many deposits as loans, that is, their Loan-to-Deposit ratio was 0.47.

Second, in the next chart, one can look at Loans and Leases (solid red line) created by all commercial banks in the US versus the amount of Deposits (dotted blue line). One can see

¹⁰⁴ *Forbes.com*, [Largest U.S. Banks To Benefit From Improving Loan-To-Deposit Ratios](#), 25-Jun-2018

on the chart below that loans and deposits tracked together quite well from 1973 through October, 2008:



Source: Board of Governors of the Federal Reserve System (US), Deposits, All Commercial Banks [DPSACBM027NBOG], and Loans and Leases in Bank Credit, All Commercial Banks [TOTLL], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/DPSACBM027NBOG>, December 16, 2021

This changed in November, 2008 when the Fed began adding deposits into the system via Quantitative Easing—that is, creating money directly for the public instead of for banks alone—as explained *Appendix L: Quantitative Easing*, so the chart looks different after that date.

To a bank, a deposit is not something they can lend out, it is a record of how much they owe the depositor.

The *money multiplier* model misleads in the direction of thinking that there is real money that a bank needs to acquire and then they create fake money on top of that. The supposed “real money” is what some people call *base money*, what is called *bank reserves* in this book. But depending on one’s point of view, both types of money—customer deposits and bank reserves—are equally real or equally fake. Both are debt-based money, a record of who owes what to whom. They have no reality beyond that.

The money multiplier model veils truth by substituting a complex process for something very simple: commercial banks *create* people’s money, create deposits, by making loans. It lends to the belief that banks are intermediaries who receive something valuable from one

party and lend that valuable something out to another party, thus hiding the truth of our money system. This is a major disservice given the consequences, described starting at *Part 2: Consequences of the Debt Standard*, that necessarily result from the nature of our money system.

This illusion about the “money multiplier effect” was pushed in certain economics textbooks and gained acceptance with a lot of people. But our money system has not worked that way for many decades: Banks make loans, which creates money, creates deposits. *That’s* how our money gets created.

The term *fractional reserve* refers to the fact that banks need far less reserves than they have deposits or loans outstanding because reserves move in both directions between banks and thus many requests for reserves cancel each other out. See *Appendix Zero: Bank reserves are also debt* for a more complete description of bank reserves.

Appendix D: Illusion—“My money is not debt”

The reaction of many people to [Fact 1](#) and [Fact 2](#) goes something like this: “I work for a company and I get paid a salary. I then use that salary to buy real things like food, gasoline, clothes, and so forth. That’s all real stuff: real work, real money, real goods. It has nothing to do with debt. Yes, my salary goes into the bank and then I get cash from the ATM, or use my debit card, or write checks to buy things. But there’s no debt involved in any of that.”

One problem with this thought process is that it doesn’t address the issue of where the money that gets paid as salary comes from in the first place. Let’s take a set of simple examples where the trail is easy to follow: Let’s say I have a job at Company L that buys lumber from sawmills and sells it to builders and householders.

1. Week 1: A builder gets a loan from a bank and uses part of that loan to buy lumber from Company L to build a house. So this week, my salary comes from a bank loan granted to the builder, part of which the builder uses to buy lumber from the place where I work, Company L.
2. Week 2: A homeowner wants to remodel their house. They get a home equity loan from a bank and use part of the loan to buy lumber from Company L to do their remodeling. So this week, my salary comes from a loan granted to a homeowner.
3. Week 3: There’s a windstorm that does some damage in the area. Several people arrive at Company L and buy plywood and other lumber to do repairs to their homes. They use credit cards to make their purchases. So this week my salary comes from credit card loans from banks to several people.

So in each case, my salary, “my money,” comes from the proceeds of bank loans that the borrowers chose to spend at the company where I work. Who created that money? The banks, granting loans to a builder and homeowners.

So a person might say, “OK, that works for those cases, but what if someone who already has a lot of money and doesn’t need a loan arrives and buys lumber with a check, or cash, or a debit card? Where’s the debt in that?”

Consider your own case: when you take some of that salary obtained as described above to buy food, you appear to the food shop people as “someone who comes in and buys with cash.” The source of the money—let’s say it was the bank loan to the builder—is not visible to the food shop owner. They see you as someone who bought some food for money, whatever form it might be in: cash, a check, or a debit card. But that money came into circulation via the loan from a bank to the builder, and then you used it to purchase food.

So it is with all of the money in our industrialized societies. So then you might say, “I’m not sure that’s possible. With some of the loans being repaid every day, how could there possibly be enough money in circulation to support a vibrant economy?”

Here’s a quick summary of outstanding loan amounts in 2018; we’ll choose the US because the statistics are so easily available:

Residential mortgages — \$10.8 Trillion
Commercial mortgages — \$2.9 Trillion
Apartment Complex mortgages — \$1.4 Trillion
Business loans — \$2.3 Trillion
Credit Card (plus consumer revolving) loans — \$1.0 Trillion
Automobile loans — \$1.2 Trillion

So just from this subset of bank debt, that’s over \$19 Trillion currently in circulation in 2018 in the US. By “in circulation,” I mean that the money was created by a bank loan, was spent into the economy, and is passing from party to party until the bank loan is paid off.

That’s far more than enough money to support an economy where the GDP (Gross Domestic Product), a rough measure of the goods and services sold over one year, was \$20.5 Trillion in 2018. If the money changed hands more than once during a year, it’s enough money to support a far larger economy.

For any of us who have used a credit card, one clue to the nature of this system is this: When you make a purchase with a credit card, you generally need to scrawl your signature on the screen of the card reading machine. Why is that? Because you have just signed a loan agreement to pay the bank the amount of the purchase. To quote the Bank of England from [*Fact 1*](#): “At that moment, new money is created.”

That’s right. You want to make a purchase. You swipe or insert your card into the machine. From that card scan, the bank recognizes you as one of their customers and checks to see whether the amount you want to spend (borrow!) is within your credit limit. They send back an electronic signal indicating that they approve the amount. Then, just as if you were sitting in the bank’s office, you sign that you will pay the amount borrowed. You plus the bank just created new money that did not exist prior to this transaction. The bank didn’t take it from someone else’s savings. New money got created; and a new debt, a new IOU, also got created, in an equal amount. To sum up, you borrowed the money from the bank and gave it to the retail shop for the merchandise you purchased. New money and the always-present equivalent amount of new debt got created. It’s a perfect example of the true nature of our money: *bank credits* or *corporate currency*.

Appendix E: Illusion—“I am debt free, so none of this debt stuff applies to me”

Interest payments are everywhere, paid by everyone

People have told me that none of this debt and interest stuff has anything to do with them because they are debt free. Would that it were so!

Congratulations to those who are free of personal debt! That’s a great position, a great idea. But even if a person or business has no specific debts, if they spend money at all, they pay a lot of interest.

How so? First, we all know these two facts: most governments are in debt up to their eyeballs; and you can find taxes everywhere: on income, sales, gasoline, alcohol, airline tickets, phone bills, licenses, and so forth. Whenever you pay a tax, some portion of that payment goes to paying interest on the debt of the government to which you are paying the tax.

Second, there are debts everywhere. When you buy a product at a retail shop, you are helping to pay interest on loans taken by: the retail shop; the owner of the premises; the utilities that supply the shop with electricity, water, and phone; and every company that contributed to the growing or manufacturing, packaging, shipping, warehousing, insuring, and advertising the product. There are literally hundreds, sometimes thousands, of companies that contribute to the building of single consumer products we buy, and almost every one of those companies has debt. So when you buy a product, part of the price helps all of those organizations pay interest.

Collecting interest is likely the largest business in the world. So it impacts all of us.

Appendix F: Illusion—“The idea that money is destroyed when bank loans are repaid is wrong”

(To understand this topic, it is required that you understand the nature of bank reserves. If you do not, then please go first to *Appendix Zero: Bank reserves are also debt* and then return here.)

This appendix shows, in sufficient accounting detail to count as proof, how people’s money is destroyed when a bank loan is repaid.

Confusion arises for some because they confuse people’s money, the public’s money, with bank reserves. Both types of money are destroyed when the loan that created them is paid off:

- *The public’s money:* When a customer of a commercial bank pays off a bank loan from that commercial bank, the amount of our money, the public’s money, that was created by the loan is destroyed. The loan repayment may cause the movement of bank reserves from one bank to another, but no bank reserves are destroyed.
- *Bank reserves:* When a commercial bank pays off a loan of bank reserves from the central bank, then the amount of bank reserves created by that loan are destroyed.

Further confusion can arise when people say things such as “a single unit of currency can retire multiple units debt.” That statement is true in the bond market, but it is not true of bank loans, as demonstrated below.¹⁰⁵

¹⁰⁵ The reason the statement “a single unit of currency can retire multiple units debt” is true in the bond market is that bank-created money is lent to a company or government when someone purchases one of their bonds. That bank-created money goes from the buyer’s bank account to the bond-seller’s bank account. Typically then, the seller of the bonds spends that money back into the economy. The money thus moves from the bond seller’s bank account to the bank accounts of those with whom they spent the money. Thus, no new money was created or destroyed, it simply circulated from bank account to bank account. The seller of bonds can accumulate money and pay off one or all of their bonds. No money would be destroyed by that action either. It would simply be circulation of money from their bank account to the bank accounts of bond holders. So in the bond market, a single unit of bank-created money could be used repeatedly to pay off bonds. That’s not how it normally works because more often than not, bond debt grows and grows, but it can and does happen in individual instances in which a company, for example, sets out to reduce or eliminate its debt load. It is perhaps the understatement of the book to say that governments rarely do reduce or eliminate their debt load—except via default.

Fact 1 shows that our money, the public's money comes from commercial banks when they make loans to us, members of the public. *Appendix Zero* show that banker's money, also known as bank reserves, comes from central banks when they make loans to commercial banks.

It is easy to get confused about the difference between those two types of money, in part because both are called *money*, and both are called “Canadian Dollars” or “US Dollars” or “Japanese Yen” or whatever country they are from. Our money, the public's money, should really be called “commercial bank credits” or “corporate currency” because that's who that money comes from, corporations that are commercial bankers, when they make loans to us. And banker's money, bank reserves, should be called “central bank credits” because that's who that money comes from, central bankers, when they make loans to commercial banks.

The discussion below shows how people's money gets destroyed while having no impact on the amount of bank reserves in the system. If you prefer information in video format, the following links connect to videos lasting a total of 34 minutes that supply substantially the same information as is written below. The title of the video series is:

Is Money Destroyed When Loans Are Repaid? Mike Black Answers

presented in three parts:

[Part 1](https://youtu.be/8oJG0janREg) (https://youtu.be/8oJG0janREg)

[Part 2](https://youtu.be/gLuoINB7WJk) (https://youtu.be/gLuoINB7WJk)

[Part 3](https://youtu.be/JCuMAoHpM_4) (https://youtu.be/JCuMAoHpM_4)

To distinguish between the fate of our bank account money and bank reserves when a loan is repaid, let's go through the same path as Mike Black did in the videos linked above.

What happens with the public's money?

First we'll look at this from the point of view of regular people and businesses, that is, customers of a commercial bank. Each numeric change in the table is highlighted by a right arrow and a colored border, green when a number increases, red when it decreases. Each graphic is followed by an explanation in text. For the sake of clarity, interest payments are excluded.

Step 1: Starting point

BANK CUSTOMER'S VIEW (numbers in columns in thousands)						
1. Starting point:						
Alan (uses Bank X)		Bob (uses Bank Y)		Carol (uses Bank Z)		Public Money Supply
Bank Acct.		Bank Acct.	Bank Loan	Bank Acct.		
1		1		1		3

We start with three personal bank accounts at commercial banks—Alan's account at Bank X, Bob's account at Bank Y, and Carol's account at Bank Z—each with \$1,000. We will

keep track of the impact of changes in these accounts on the total public money supply—\$3,000 to start—in the rightmost column.

Step 2: Bank Y loans \$1,000 to Bob

BANK CUSTOMER'S VIEW (numbers in columns in thousands)						
1. Starting point:						
Alan (uses Bank X)		Bob (uses Bank Y)		Carol (uses Bank Z)		Public Money Supply
Bank Acct.		Bank Acct.	Bank Loan	Bank Acct.		
1		1		1		
2. Bank Y Loans \$1,000 to Bob:						
1		→ 2	→ 1	1		→ 4

Bob obtains a bank loan from Bank Y for \$1,000. This increases the amount in his bank account by \$1,000, from \$1,000 to \$2,000, and increases the public's total money supply by the same amount, from \$3,000 to \$4,000. Bob owes the bank \$1,000.

Step 3: Bob pays Carol a \$1,000 check for a car

BANK CUSTOMER'S VIEW (numbers in columns in thousands)						
1. Starting point:						
Alan (uses Bank X)		Bob (uses Bank Y)		Carol (uses Bank Z)		Public Money Supply
Bank Acct.		Bank Acct.	Bank Loan	Bank Acct.		
1		1		1		
2. Bank Y Loans \$1,000 to Bob:						
1		→ 2	→ 1	1		→ 4
3. Bob pays Carol \$1,000 check for car:						
1		→ 1	1	→ 2		4

Bob buys a used car from Carol, paying her with a check for \$1,000. This reduces the amount in Bob's checking account by \$1,000, from \$2,000 to \$1,000. It increases Carol's bank account by \$1,000, from \$1,000 to \$2,000. The public's total money supply remains the same.

Step 4. Alan pays Bob a \$1,000 check for some work

BANK CUSTOMER'S VIEW (numbers in columns in thousands)						
1. Starting point:						
Alan (uses Bank X)		Bob (uses Bank Y)		Carol (uses Bank Z)		Public Money Supply
Bank Acct.		Bank Acct.	Bank Loan	Bank Acct.		
1		1		1		3
2. Bank Y Loans \$1,000 to Bob:						
1		→ 2	→ 1	1		→ 4
3. Bob pays Carol \$1,000 check for car:						
1		→ 1	1	→ 2		4
4. Alan pays Bob \$1,000 check for some work:						
→ 0		→ 2	1	2		4

Bob does some work for Alan, who pays him with a check for \$1,000. This reduces Alan's account by \$1,000, from \$1,000 to zero. It increases Bob's account from \$1,000 to \$2,000. The public's total money supply remains at \$4,000.

Step 5: Bob repays his bank loan

BANK CUSTOMER'S VIEW (numbers in columns in thousands)						
1. Starting point:						
Alan (uses Bank X)		Bob (uses Bank Y)		Carol (uses Bank Z)		Public Money Supply
Bank Acct.		Bank Acct.	Bank Loan	Bank Acct.		
1		1		1		3
2. Bank Y Loans \$1,000 to Bob:						
1		→ 2	→ 1	1		→ 4
3. Bob pays Carol \$1,000 check for car:						
1		→ 1	1	→ 2		4
4. Alan pays Bob \$1,000 check for some work:						
→ 0		→ 2	1	2		4
5. Bob repays his loan:						
0		→ 1	→ 0	2		→ 3

Bob repays his \$1,000 bank loan. This reduces the amount in his checking account by \$1,000, from \$2,000 to \$1,000. It reduces the amount he owes the bank to zero. And it reduces the public money supply by \$1,000, from \$4,000 to \$3,000.

This simple example clearly demonstrates how our money, the public's money, is increased by the granting of a loan and destroyed by the repayment of that loan. Next, let's look at the same set of transactions from the point of view of the banks.

Step 1: Starting point

BANK'S VIEW (numbers in columns in thousands)									
1. Starting point:									
Bank X			Bank Y			Bank Z			
Liabilities	Assets		Liabilities	Assets		Liabilities	Assets		Bank
Alan Bank Acct.	Loan	Reserve Acct. @ Fed	Bob Bank Acct.	Loan	Reserve Acct. @ Fed	Carol Bank Acct.	Loan	Reserve Acct. @ Fed	Reserves Money Supply
1		10	1		10	1		10	30

For the sake of clarity and simplicity, we'll start by assigning just \$10,000 of bank reserves—the money banks use to pay each other—to each of our three banks. Note that from the point of view of the banks, the bank reserves are an asset, something they own; and the amounts in the bank accounts of their customers are liabilities, that is, something the banks owe to their customers. The bank reserves of the three banks total up to \$30,000. The bank reserves of each bank are kept in an account for each bank at the nation's central bank. Since the banks in this example are US banks, their reserve accounts are kept at the US Federal Reserve, also known as “the Fed.”

Step 2: Bank Y loans \$1,000 to Bob

BANK'S VIEW (numbers in columns in thousands)									
1. Starting point:									
Bank X			Bank Y			Bank Z			
Liabilities	Assets		Liabilities	Assets		Liabilities	Assets		Bank
Alan Bank Acct.	Loan	Reserve Acct. @ Fed	Bob Bank Acct.	Loan	Reserve Acct. @ Fed	Carol Bank Acct.	Loan	Reserve Acct. @ Fed	Reserves Money Supply
1		10	1		10	1		10	30
2. Bank Y Loans \$1,000 to Bob:									
1		10	→ 2	→ 1	10	1		10	30

Bank Y loans \$1,000 to Bob. This increases the amount in Bob's bank account, that is, the amount the bank owes to Bob, from \$1,000 to \$2,000; and Bank Y has a new asset, that is, Bob's promise to pay them \$1,000. This transaction is strictly between Bob and Bank Y. It has no impact at all on bank reserves since no bank owes anything to any other bank as a result of this transaction.

Step 3: Bob pays Carol a \$1,000 check for a car

BANK'S VIEW (numbers in columns in thousands)									
1. Starting point:									
Bank X			Bank Y			Bank Z			
Liabilities	Assets		Liabilities	Assets		Liabilities	Assets		Bank
Alan Bank Acct.	Loan	Reserve Acct. @ Fed	Bob Bank Acct.	Loan	Reserve Acct. @ Fed	Carol Bank Acct.	Loan	Reserve Acct. @ Fed	Reserves Money Supply
1		10	1		10	1		10	30
2. Bank Y Loans \$1,000 to Bob:									
1		10	→ 2	→ 1	10	1		10	30
3. Bob pays Carol \$1,000 check for car:									
1		10	→ 1	1	→ 9	→ 2		→ 11	30

Carol sells a used car to Bob for \$1,000 and he pays her with a check drawn on Bank Y. She deposits the check in her account at Bank Z. This initiates what is called the payment clearing process: Bank Z sends an electronic message to the nation's bank clearing system, run by the Fed, that Bank Y owes it \$1,000 in bank reserves. So the Fed transfers \$1,000 in bank reserves from the account of Bank Y to the account of Bank Z, and sends an electronic message to Bank Y that it has transferred those reserves because of Bob's check being deposited in Carol's account. In terms of the public's money, Bob's account is reduced by \$1,000, from \$2,000 to \$1,000; and Carol's account is increased, from \$1,000 to \$2,000. In terms of bank reserves, Bank Y's reserves are reduced by \$1,000 from \$10,000 to \$9,000; Bank Z's reserves are increased from \$10,000 to \$11,000. The total of bank reserves in the system remains the same at \$30,000.

Step 4. Alan pays Bob a \$1,000 check for some work

BANK'S VIEW (numbers in columns in thousands)									
1. Starting point:									
Bank X			Bank Y			Bank Z			
Liabilities	Assets		Liabilities	Assets		Liabilities	Assets		Bank
Alan Bank Acct.	Loan	Reserve Acct. @ Fed	Bob Bank Acct.	Loan	Reserve Acct. @ Fed	Carol Bank Acct.	Loan	Reserve Acct. @ Fed	Reserves Money Supply
1		10	1		10	1		10	30
2. Bank Y Loans \$1,000 to Bob:									
1		10	→ 2	→ 1	10	1		10	30
3. Bob pays Carol \$1,000 check for car:									
1		10	→ 1	1	→ 9	→ 2		→ 11	30
4. Alan pays Bob \$1,000 check for some work:									
→ 0		→ 9	→ 2	1	→ 10	2		11	30

Bob does some work for Alan and Alan pays him by a check for \$1,000 drawn on Bank X. Bob deposits that check in his account at Bank Y. Again, this initiates the payment clearing process: Bank Y sends an electronic message to the Fed that Bank X owes it \$1,000 in reserves because of Alan's check to Bob. The Fed transfers those reserves from the account it holds for Bank X, reducing it from \$10,000 to \$9,000, and increasing the reserve account of Bank Y from \$9,000 to \$10,000. Notice again that the total amount of bank reserves in the system is unchanged. Alan's account was reduced by \$1,000 to \$0 and Bob's account was increased from \$1,000 to \$2,000.

Step 5: Bob repays his bank loan

BANK'S VIEW (numbers in columns in thousands)									
1. Starting point:									
Bank X			Bank Y			Bank Z			
Liabilities	Assets		Liabilities	Assets		Liabilities	Assets		Bank
Alan Bank Acct.	Loan	Reserve Acct. @ Fed	Bob Bank Acct.	Loan	Reserve Acct. @ Fed	Carol Bank Acct.	Loan	Reserve Acct. @ Fed	Reserves Money Supply
1		10	1		10	1		10	30
2. Bank Y Loans \$1,000 to Bob:									
1		10	→ 2	→ 1	10	1		10	30
3. Bob pays Carol \$1,000 check for car:									
1		10	→ 1	1	→ 9	→ 2		→ 11	30
4. Alan pays Bob \$1,000 check for some work:									
→ 0		→ 9	→ 2	1	→ 10	2		11	30
5. Bob repays his loan:									
0		9	→ 1	→ 0	10	2		11	30

Bob repays his loan to Bank Y. Bank Y reduces Bob's account from \$2,000 to \$1,000 and reduces his loan balance from \$1,000 to \$0. This is strictly between Bob and Bank Y, so no movement of bank reserves takes place.

Notice that although bank reserves moved *between* banks, these transactions of people's money—granting loans, payments by check, repayment of loans—caused no increase or decrease of the total amount of bank reserves in the system. So while the granting and repayment of loans by banks to their customers did increase and subsequently destroy the amount of money in the hands of the public, it did not increase and then destroy bank reserves. Bank reserves are created and destroyed by the granting and repayment of loans by a central bank to a commercial bank.

So the answer to the question:

When a bank loan is repaid, is the money destroyed or is it kept by the bank?

has a different answer depending on the type of money about which one is speaking. A loan to the public—that is, to an individual, business, or government—by a commercial bank creates new money; repayment of that loan by the public to a commercial bank destroys that amount of money. But these loan grants and repayments do not increase or decrease the supply of bank reserves; the bank reserves circulate among the banks just as the public's money circulates among members of the public.

What does increase or decrease the supply of bank reserves? Transactions between commercial banks and the nation's central bank. Notice that, just as we keep our checking accounts—or *current accounts* as they are called in some countries—at commercial banks, the commercial banks keep *their* version of checking accounts, that is, their bank reserve accounts, at the central bank. So when they borrow bank reserves from the central bank, it increases the supply of bank reserves. When the commercial banks repay such loans, it decreases the total amount of bank reserves in the system.

Some rightly call this a *two-tiered money system*,¹⁰⁶ with circulation of the public's money—also known as bank account money, or checking account money—among the public; and with the circulation of bank reserves solely among the banks, the national government, and selected government agencies.

Please realize also this: In the example above, the Starting Point shows Alan, Bob, and Carol having bank accounts with \$1,000 each. That money in each account is also a result of a bank loan made to someone somewhere in the system. If those loans were repaid, there would be no money in the system at all! This is what Robert Hemphill was speaking about in [Fact 3](#), and that's the meaning of the quote I showed there from the Bank of England:

If everyone in the economy were to pool all of their assets and debts together as one, all of the financial assets and liabilities — including money — would cancel out...

¹⁰⁶ Joseph Wang, *The Fed Guy*, [Two Tiered Monetary System](#), 29-Aug-2020. The article contains concise descriptions of bank reserves and bank deposits, that is, the public's money.

Appendix G: Illusion—“It can’t be that banks create money; if they could, they could never collapse”

Some ask: If banks can create money from nothing, how does it make sense that banks can fail, that they can go bankrupt?

The short answer is that banks must remain profitable (or get a bailout when they don’t!), or they can rapidly tip into collapse.

Here’s how that happens: In the course of a day, money comes into banks as customer deposits, customer loan repayments, short-term borrowings, interest on investments, profits from trades, and so forth; it goes out as customer deposit withdrawals, repayments on borrowings by the bank, payment of the bank’s operational expenses and taxes, and so forth. In other words, there is a great deal of money flowing into and out of the bank.

If a bank has made a series of ill-advised loans—let’s say they financed the building of a new shopping mall just one mile from another shopping mall and the new mall is failing to attract customers—and they stop receiving payments due from their customers on those loans, they can quickly arrive at a situation where, day after day, more money is going out of the bank than is coming in to the bank. This in itself can sink the bank, that is, they can run out of money to meet their obligations—remember, the bank *owes* the amount of deposits to all of its depositors. If word gets out that the bank is in trouble, then depositors try to protect their money by taking it out of the bank as quickly as possible. This accelerates pressure on the bank in terms of its ability to meet its obligations. If lots of customers, or even just a few major business depositors, start removing their money from the bank, it can quickly turn into a classic bank run where the bank or regulators simply close its doors.

The key item to understand here is that when people even suspect that a bank is in trouble, they tend to avoid that bank. Of course they want to withdraw their deposits—we’ve all seen photos of bank runs where depositors panic and line up outside of a bank to try to get their money.

But people also shy away from the suspect bank for new loans: No prospective home buyer wants to make a home purchase deposit and set up all the contracts to purchase a home and then find out at the last minute that the bank from whom they arranged to receive a mortgage has closed its doors. The prospective buyer could lose their deposit and the entire deal can fall apart. So no one wants to put money into or obtain money from a failing bank. Everyone runs away, depositors and borrowers. The bank is left with all obligations, all payments, and little or no income. Thus, the bank collapses.

The majority of bank failures have likely occurred from what is called *duration mismatch*, described in the chapter *What to do about banking* in *Book 2*.

Appendix H: Illusion—“You are not taking *Modern Monetary Theory* into account”

What then shall we say to the new paradox, that public incumbrances [i.e., government debts], are, of themselves, advantageous, independent of the necessity of contracting them; and that any state ... could not possibly have embraced a wiser expedient for promoting commerce and riches, than to create funds, and debts ... without limitation? Reasonings, such as these, might naturally have passed for trials of wit among rhetoricians ... had we not seen such absurd maxims patronized by great ministers, and by a whole party among us.
—David Hume, [On Public Credit](#), 1752

The title of this appendix is phrased as an accusation to indicate two things: this accusation has already been leveled at me despite my agreement with the MMT people on some key points; and discussions of Modern Monetary Theory (MMT) are rife with accusations and insults, both by its proponents and detractors. Both groups believe they see reality and that their opponents are so out of reality that insulting them somehow seems to be the only option.¹⁰⁷ That sure doesn't lead toward rational discussion, but I'll try.

Modern Monetary Theory (MMT) is the rage in certain circles because it claims that a government that has a central bank that can print its own currency (for example, the US, UK, or Japan) can create *a lot* more debt (money) than it currently creates, from thin air, with virtually no drawbacks. Thus, politicians can finance any government program they want and no one ever has to worry about paying for it because new money can simply be printed up to pay the debts plus interest as they come due. That's clearly tempting for politicians to have “academic support from economists” for dramatically increasing spending. MMT takes *something for nothing* to an entirely new level.

The quote above, from the year 1752, tells us that the “modern” in Modern Monetary Theory is anything but given that philosopher David Hume describes the main tenet of MMT, and its support from a major political party, nearly 300 years ago.

¹⁰⁷ Perhaps this stems from examples such as this: Up until sometime in 2021, if you went to MMT proponent Warren Mosler's web site, MoslerEconomics.com, the banner at the top of each page on his web site said, I kid you not, “The Center of the Universe.” (Here's a [link from the Wayback Machine](#) that shows his site in 2021.) And here I thought that Earth was a small planet in a solar system on the outskirts of a galaxy with over 100 billion stars, with said galaxy being one of over 100 billion galaxies, yet Mr. Mosler's internet site is the Center of the Universe. (See how those insults creep in almost immediately! 😊)

The most unrealistic economic proposal of all time?

I will attempt to save readers time here by getting to the claim by MMT proponents that is my candidate for entry into the "most unrealistic proposal by economists ever" hall of fame. Then you can decide if you want to read the additional material about MMT that follows.

MMT proponents admit that if the government borrows and spends *too* much money, it can cause unwanted price increases, that is, what people call *price inflation* (like what actually happened during the Big Virus when governments printed up a lot of money and prices skyrocketed). They claim that if there is ever too much price inflation from their increased debt (money) creation, the government would simply raise taxes to remove excess money from the economy and thereby drive price increases back to a much lower level.

Think through the 1970's with strong price inflation raging across the world: Millions, perhaps billions of people were struggling to make ends meet because of rapidly rising prices for necessities. How many politicians would step forward in such a situation and announce that they were going to substantially *raise* taxes, telling people, "Yes, I know you are hurting, and this will hurt even more, but down the road, price inflation will calm down and you'll thank me for having substantially raised your taxes." How many politicians would do that? Any number greater than zero seems like an absurd exaggeration. They would know it was *political* suicide at best. And suicide for their political party.

Consider what would happen to a politician who proposed such a tactic in 2022, when price inflation was obvious to everyone. If US President Biden got on television and told people he was raising their taxes to drain money from the economy to slow down spending to fight price inflation, his polling numbers would likely drop to a single-digit approval rating.

Many politicians will be happy to take the advice of MMT economists and create more debt (money); but they won't raise taxes when their constituents are already hurting from price inflation except perhaps if the new taxation is said to be only against some group that is out of favor politically. And taxing some small group is *not* going to bring down raging price inflation.

"Debt equals savings": Strong support by MMT for income inequality

MMT proponents claim to be for solving income inequality, but this fails the logic test.

NPR interviewer Leila Fadel asked this of MMT proponent Prof. Stephanie Kelton about the US government \$34 Trillion in debt: "So \$34 Trillion in debt sounds scary. Should people be afraid?"

Kelton's reply: "No. They shouldn't. It's the word *debt* that makes people afraid. And so when I think about this, you know, I look at this number, and I think, well, it's just keeping track of our savings."

Kelton is saying that the person who lent money to the government and now holds a government bond has that bond as savings. But this ignores the obvious fact that for every debt, one party is owed and another party owes and that, in our society at this time, there is a *massive* imbalance in who owes and who is owed. *Chapter 18: Accelerating wealth inequality by design (The money harvesting machine)* shows that the so-called "bottom 80%" on the income scale pay \$Trillions in interest payments every year to the "top 10%." In other words, while government bonds may be savings for the rich (because they are owed), it's a debt for the rest of society (because they owe). The rich *collect* far more interest

than they pay. The poorer *pay* far more interest than they collect. Debt, with its demand for interest payments, is the foundational engine for accelerating income inequality in our world. The more debt we have, the greater and the faster this inequality proceeds.

Valuable points from MMT

If you can get past the tone, MMT proponents have some valuable points:

- Our modern money is strictly an accounting phenomenon—numbers are added to and subtracted from computer entries to increase or decrease “money” in those accounts.
- A government that prints its own currency (for example, the US, UK, Japan, or China) can’t run out of money because they can simply increase the number in the computer-based account of anyone they wish to pay. (Perhaps it should be noted that while this may work—while this government remains in power—for anyone in their own jurisdiction, it can be less likely to work for payments to parties in other countries.)
- Governments that can print their own currency don’t tax because they need the income (why would they need income if they can simply print whatever they need), they tax their citizens to create a need for that otherwise-worthless currency, compelling people to sell goods and services for that currency so they can pay their taxes.

MMT people admit that banks create money (as described in *FACT 1: Commercial banks create our money—the public’s money—by lending.*), but to say they minimize that fact would be an understatement. In the 117 pages of Mr. Mosler’s “Seven Deadly Innocent Frauds of Economic Policy”, there it is, at the bottom of Page 64:

“Just as loans create deposits in the banking system...”

That’s the only mention of the mechanism that creates most of the public’s money. In my view, such minimizing of [Fact 1](#) misleads in a *very* big way. MMT proponents want to focus the discussion on government, not on commercial banks.

What is MMT really offering the world?

More debt

At more than \$300 Trillion in 2023, it hardly seems that the world needs more debt. As shown in *Part 2: Consequences of the Debt Standard*, debt and interest payments are at crushing levels. But MMT certainly offers more debt. Its proponents would counter that government debt makes little difference when the government prints its own money; that it’s only private sector debt overload that is dangerous. True or not, we already have overloads in both types of debt.

More currency depreciation, that is, more price inflation

Due in part to MMT gaining acceptance, governments (Treasury Departments plus the central banks) printed up \$Trillions to battle the economic fallout from lockdowns related to the virus in 2020 and the years following, that is, many countries are running real-time MMT experiments. So in 2022, for example, we had strong price inflation that was devastating for

those already struggling to make ends meet. Can you envision any politician from any country telling people that their taxes would be raised to drain money from the system to fight this price inflation? The idea is absurd.

Furthermore, MMT could assist in the rise of devastating currency depreciation and price inflation by giving foreign investors and central banks the idea that a country is rather cavalier in its treatment of money. Even if modern money is only a bunch of bits on computers, most central banks and governments work hard to give the impression that they are at least somewhat careful about how much of that money gets created.

For example, there is this from the US Treasury web site:

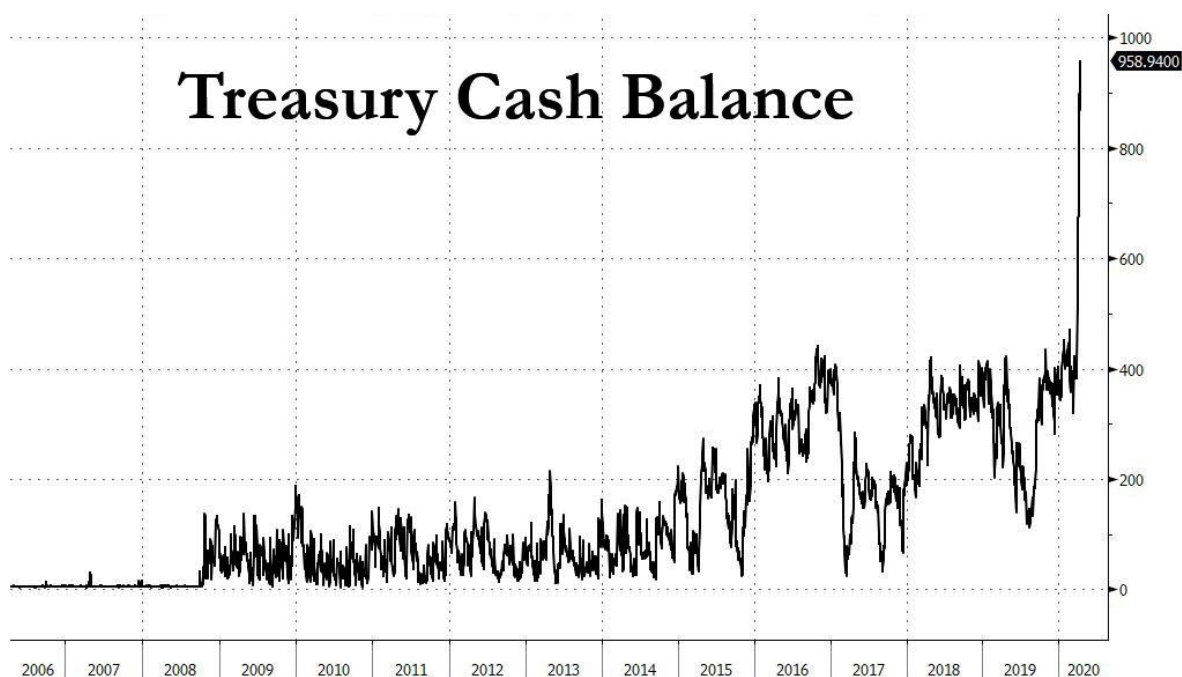
Treasury's operating cash is maintained in an account at the Federal Reserve Bank of New York and in Tax and Loan accounts at commercial banks. The Daily Treasury Statement (DTS) is available by 4:00 p.m. the following business day.

The Monthly Treasury Statement of Receipts and Outlays of the United States Government (MTS) is normally released on the 8th workday of the month following the reporting month. The MTS is published to meet the needs of: those responsible for or interested in the cash position of the Treasury; those who are responsible or interested in the Government's budget results; and individuals and businesses whose operations depend upon or are related to the Government's financial operations.

—*Treasury.gov*, [Cash and Debt Forecasting](#)

Perhaps MMT people are correct that the US government has no need for money management accounts since they can create that money at will. But the US Treasury does not act that way, carefully making sure they have enough cash on hand to make expected payments. In fact, that readiness was endangered by the temporary shutdown of the New York Fed for two days due to flooding during Superstorm Sandy in 2012. The Treasury and Fed reacted by creating a duplicate facility in Chicago so that, should the New York operation ever be shut down again, the Chicago operation could immediately take over its functions.

Here is a chart of the US Treasury's cash (bank reserves) at the Fed, showing a balance of almost \$1 Trillion as of April 15, 2020:



(Source: [zerohedge.com](https://www.zerohedge.com/markets/treasury-cash-balance-soars-to-record-959-billion-following-bill-issuance-tsunami), [Treasury Cash Balance Soars To Record \\$959 Billion Following Bill Issuance Tsunami](https://www.zerohedge.com/markets/treasury-cash-balance-soars-to-record-959-billion-following-bill-issuance-tsunami))

If nations gave off a more cavalier attitude, comparing their currency to points on a football scoreboard, as MMT proponents do, foreigners might fear a large devaluation of their positions denominated in that currency. Countries are not monetary islands. When other countries see cavalier treatment of their currency and debt by a country, money sometimes flees that country in a big hurry. Capital investment by foreigners comes to a screeching halt. No one wants to lend that country money and their interest rates skyrocket, making it very difficult to operate in a debt-based world.

MMT might temporarily work for a country such as the US that dominates global financial markets (though the skyrocketing prices of 2021-22 argues otherwise). But think of countries like Turkey, Argentina, or Brazil. Multiple times, foreigners have decided that these countries were not adequately protecting the value of their currencies and withdrew their money from these countries, collapsing the market value of the currencies of these countries, causing very high interest rates, and ultimately requiring the replacement of the current currency with a new one, where one of the new currency units equaled 10,000 or more of the old currency.

More government spending

Most current MMT proponents have a political bias that repeatedly states that government can spend a lot more money on people, on social programs. If a government that favors MMT and has that same political bias takes power, that happens. But if history is any guide, governments have a nasty habit of perpetuating their own power and, to that end, many choose to spend a lot more on weaponry, military, and spying capability than on increasing the general well-being of the populace. (Some would argue that the US has been

demonstrating this for decades.) So general acceptance of MMT would almost certainly add fuel to the overheated arms race that has plagued the planet for centuries.

Jubilee for government

MMT promotes what could be considered a debt jubilee for government through the printing of new money to pay off old debts. Jubilees were a benefit to the poor in ancient times; now they are a benefit for the powerful: banks and national governments.

Better understanding of what modern money actually is

From the point of view of increasing people’s understanding of the nature of modern money, MMT is a boon. They “pound the table” that money is an accounting phenomenon and nothing more; our money is numbers on the computer of government and banks. Mr. Mosler repeatedly compares modern money with the points that a stadium puts up on a scoreboard to keep score in a contest:

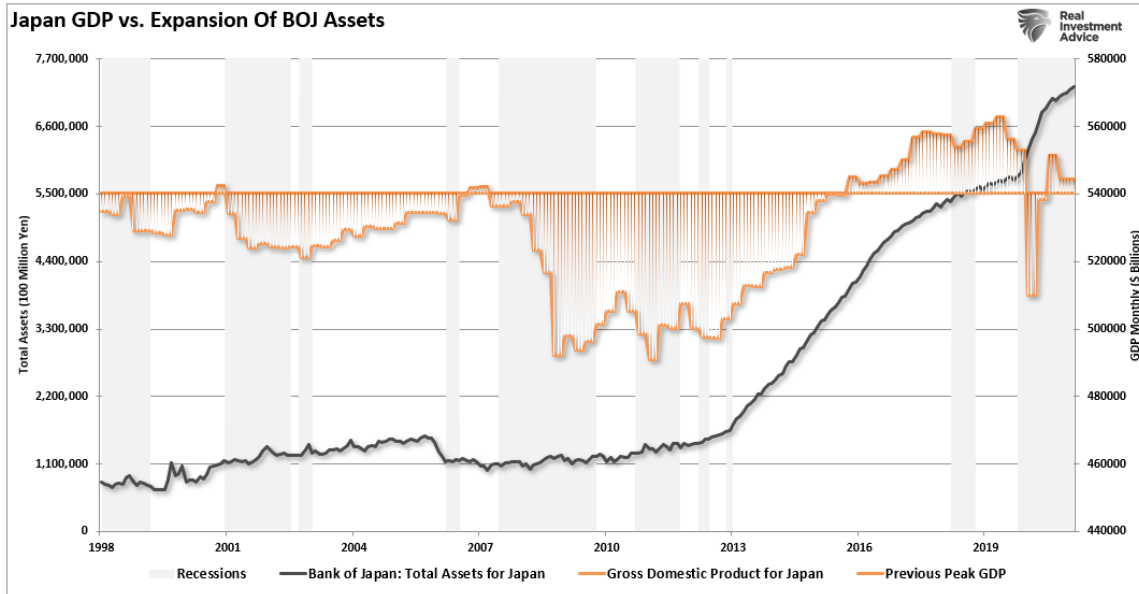
Governments, using their own currency, can spend what they want, when they want, just like the football stadium can put points on the board at will.

Mosler conveniently leaves out that, unlike debts, football points don’t need to be paid back.

Japan

MMT proponents point to Japan as proof that their ideas work, but if that’s a victory for them, it’s rather hollow: the Japanese government has been wildly borrowing massive amounts of money for decades now, and the MMT people are correct that it has not resulted in price inflation (until 2022, that is), but Japan keeps creating ever more money because their policies have not worked to stimulate the economy. It’s fairly easy to argue that the increased debt load is weighing the country down, and thus is not a victory at all. Also, price inflation in Japan is made less likely by aging demographics and by the Asian elephants in the room: Japan is now one of the high-cost producers in Asia; China and other lower-cost Asian producers are doing lots of work that used to be done by Japan. Much of Japan’s economic growth since World War 2 has been through exports, and the rest of Asia is working very hard to “eat Japan’s lunch” in this regard.

The following chart shows the despite the massive increase in borrowing by the government in Japan (the black line on the chart), especially starting in 2013, the size of the economy (the orange line) is only very slightly larger than it was at the left of the chart in 1990:



(Source: Chart is from [The Failure Of MMT Is Now Evident](#) by Lance Roberts, chief investment strategist for [RIA Advisors](#) and lead editor of the Real Investment Report)

Some argue that Russia proved MMT wrong in 1998, and Argentina in 2019.¹⁰⁸

Hastening the demise of modern money

In its advocacy of the creation of a great deal more debt (money) by government, and its emphasis on the ephemeral nature of modern money, MMT is speeding the demise of the current money system as people realize that they trade their blood, sweat, tears, and anguish for bank credits that exist only as numbers in a computer system, numbers that can be created at the whim and will by a small coterie of bankers. At some point, people will rise up and cry out, from sea to shining sea: “With my work, I give you real value! I give you some of my *life*. I demand real value in return!”

At some point, people will rise up and cry out, from sea to shining sea: “With my work, I give you real value! I give you some of my *life*. I demand real value in return!”

¹⁰⁸ *Global Macro Monitor*, [Modern Monetary Theory \(MMT\) Proponents Have A Big Argentina Problem](#), 4-Sep-2019

Appendix I: The goldsmiths—progenitors of modern banking

When money was gold and silver coins, people sometimes stored their gold with goldsmiths because these goldsmiths had built secure facilities to prevent theft of their own inventory of precious metals. Here's an example of a receipt from 1761 given by a goldsmith named John Kent for 20 British Pounds of gold deposited by his customer William Thompson:



(Source: *Numismatic News*, [Goldsmith Receipts tell interesting tale](#))

If the goldsmith John Kent had a reputation for honest dealings, people in his area would accept receipts from Mr. Kent's facility as what we would call paper money. The gold depositor, William Thompson, could use the receipt to make a purchase from another person. The person receiving that receipt might go to John Kent's depository and retrieve the gold, or they might be happier keeping the receipt, leaving the gold safely stored at John Kent's, and later using that receipt to complete one of their own purchases.

This resulted in goldsmith receipts circulating as what we would call paper money. What goldsmiths soon realized was many people were happy to use receipts only and that much of the gold was never retrieved, that is, it never left the goldsmith's premises. They decided that they could make extra money lending "gold" at interest by issuing receipts covered by the real gold in the vault.

So now the same gold had two or more receipts for it: the original depositor receipt, and the receipt(s) issued by the goldsmith when they lent that same gold to one or more other customers. People in the region using these receipts as money had no way to know whether the receipt was issued to someone depositing gold or to someone borrowing gold from the goldsmith. This was the birth of modern banking, what people now call *fractional reserve banking*, that is, banking where the bank reserves are smaller than the amount of money issued by the goldsmith (or the bank, in our time.)

Everyone now agrees that what the goldsmiths were doing was fraud: they were issuing receipts for more gold than they possessed. They could never deliver gold for all receipts issued if all were turned in at the same time to retrieve physical gold. Thus, the goldsmiths not only created fractional reserve banking, but also invented what we now know as a bank run, during which people realize that the goldsmith (the banker) does not have sufficient backing for all of the paper money issued or electronic deposits and people, in a panic, seek to get their money back before the goldsmith (the bank) runs out of reserves.



Bank run at Northern Rock Bank, England, Summer, 2007.
(Photo source: ChrisLBecker.com)

For now, we will leave aside the discussion of whether our modern fractional reserve banking is based on fraud despite not being prosecuted as fraud because the UK made it legal with the Bank Charter Act of 1844 and most other countries followed that example.

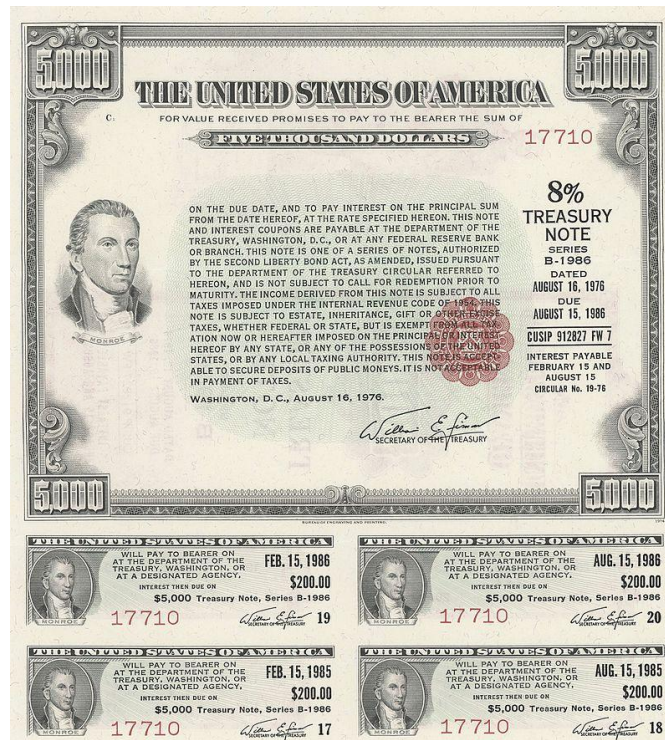
Appendix J: The Bond Market

While governments and corporations can borrow from banks, they borrow much larger amounts in what is called the *bond market*. There is a government bond market, where governments borrow through national Treasury Securities, State or Provincial Bonds, Municipal Bonds, and so forth; and there is a corporate bond market, with some bonds considered investment-grade and others called *junk bonds* that typically pay a higher interest rate, called a higher *yield*.

People and organizations lend money to a government or corporation, and the government or corporation gives their *bond* that they will repay the money by a certain date, and will pay interest on that money, either in installments or all at once when the amount borrowed is paid back. National government bonds have different names in different countries. The US government bond market involves *Treasury Bonds*, *Notes*, and *Bills*. In the UK and India, they are called *Gilts* and *Bills*, in Germany *Bunds* and *Bubills*.

Terminology: Bills, Notes, and Bonds
The US government borrowing market is typically divided into borrowings payable in 1 year or less, called Treasury *Bills*; borrowings payable in 2 to 10 years, called Treasury *Notes*; and those payable in greater than 10 years called Treasury *Bonds*.

Here is an example of a bond from the time when the investment world was tracked on paper (before what author David Rogers Webb calls *dematerialization* in his book/video called [The Great Taking](#)):

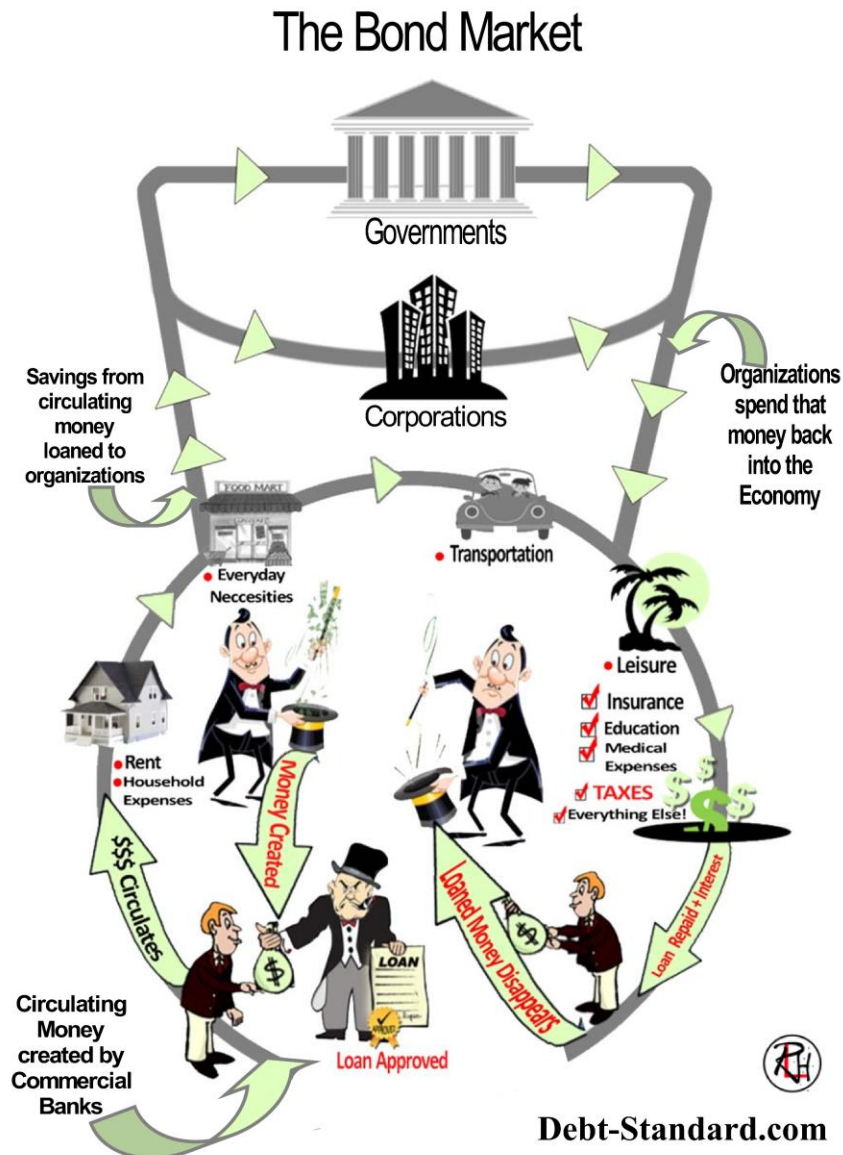


A US Treasury Bond from 1976. Note that it too is a “promise to pay.”

The first rectangle shows the *bond*, the smaller rectangles below it are called *coupons*. The bond is from the US Government, stating that they have borrowed \$5,000 and will pay that

\$5,000 back to the holder of the bond in 10 years. During that 10 years, interest will be calculated at 8% per year, and paid twice a year, each February and August, when the bond holder can submit one of the coupons for that interest payment. The bond and un-cashed coupons can be held for the full 10 years by the original purchaser (lender), or they can be sold for cash to another investor to whom the US government will then send the payments due.

Such bonds are very actively traded among investors and speculators. While the stock market grabs all the headlines, in the US, on average, the dollar value of daily trading in the bond market is typically six or seven times larger than the dollar volume of trading in the stock market.



The graphic above depicts the bond market as an extension of the money circulation graphic shown in [Fact 3](#). That circulation starts with money being created by the act of a bank making a loan, and ends with the destruction of that money when the bank loan is paid off.

Some of that circulating money ends up as savings which can be lent to a government or corporation, and then the government or corporation typically spends that money right back into the economy, that is, back into the circulating pool of banker-created money. Some who accumulate savings choose to lend their savings to governments and corporations—rather than keeping that money in a bank account—primarily for these reasons:

- to obtain a higher interest rate on their money than a bank might be willing to pay;
- because they are investing amounts that are far beyond the amount guaranteed by the government in a bank account;
- for trading purposes, as the market prices of these bonds fluctuate over time and thus the bonds might be sold to some other investor/speculator for a profit; and/or,
- the national government mandates that their organization place some percentage of its assets in national bonds (banks and insurance companies are often subject to such rules).

In the US in 2021, the dollar value of all bond market debt is more than four times larger than the supply of money created by loans from US banks. How is this possible? Because the same money can be lent repeatedly into the bond market, creating a new bond each time, while previously-created bonds have not yet been paid off. The [US Debt Clock](#)¹⁰⁹ shows the accumulation of borrowing via the bond market.

As described in *Chapter 9: So is “the government” a money creator?*, short-term government borrowings, such as those represented by US Treasury Bills (T-Bills), act as money among Big Players, that is, they can be used directly for transactions among Big Players without the need to sell them first for cash.

¹⁰⁹ The [Debt Clock](#) is an incredible free source of wide variety of data points.

Appendix K: National government taxing, borrowing, and spending

When the national government collects taxes, the money goes from the bank accounts of taxpayers held at commercial banks into the bank account of the national Treasury held at the central bank. (It may have a brief stop in between at a local bank before being forwarded to the national government account.) The process is soon reversed as the money is spent back into the economy and ends up back in bank accounts at commercial banks of those receiving payments from the government.

The same holds true when national governments borrow money through the *bond market* (see [Appendix H: The Bond Market](#)): money comes from the bank accounts of buyers of government bonds. That money goes into the bank account of the Treasury and then, again, the process is reversed as the national government spends that money back into the economy.

As described in *Chapter 9: So is “the government” a money creator?*, the national government can add to the amount of money in circulation by its borrowing through short-term instruments such as US Treasury Bills (T-Bills) which act as money among Big Players, that is, they can be used directly for transactions among Big Players without the need to sell them first for cash.

Appendix L: Quantitative Easing

In Japan in 2001, the US in 2008, the UK in 2009, the EU in 2015, and so forth, central banks decided that lowering interest rates was not having (or would not have) its expected stimulative effect, even when the central banks pushed interest rates to 0% and below; that's right, to negative interest rates! Lending was being held back by timid borrowers suffering from over-indebtedness, fear of job loss, fear of falling real estate and stock prices, and so forth; and by timid commercial bankers who were finding fewer borrowers they considered *qualified*, that is, borrowers who the banks expected to reliably pay back their loans.

So central banks unveiled *quantitative easing* (QE).¹¹⁰ They stated that it was a temporary “extraordinary measure” or “emergency measure” to meet financial conditions deemed to be highly unusual. They did not appear to understand that we were entering a perpetual financial emergency, and some of what were claimed to be temporary programs are still with us as I write in 2023. In 2022, some central banks stopped QE because of strong price inflation (which they blame on supply chain issues stemming from the pandemic, not on their own money creation), but it seems unlikely to this writer that they will stop for very long—as soon as the next obvious emergency appears, they will be back with QE again, though they will give it some other name. (They consider it essential to publicly pretend that everything is normal and under control so that they don't “panic the herd.”)

In quantitative easing, central banks buy, with money they create from nothing, some or all of the bonds (that is, the borrowings) issued primarily by the national government, or one of its agencies, or sometimes even from corporations. (Or in Japan and Switzerland, corporate stocks!) To keep within the letter of the law (though definitely *not* its spirit¹¹¹), they don't buy those bonds directly from the government or its agencies, they buy them from the private sector, mostly from or through large commercial banks. The commercial bank selling the bond receives new bank reserves from the central bank, and the owner of the bond, often a client of the bank, receives credit for a deposit in the amount of the sale. These deposits are new money, not created in the usual way by a loan from a commercial bank, but by the action of the central bank. This central bank action increases the supply of both bank reserves and the public's money. It is lending from nothing by the central bank for use by both the commercial banks and by the public.

¹¹⁰ The term was coined by Prof. Richard Werner, cited elsewhere in this book as author of two famous papers proving that banks create money, and the excellent book *Princes of the Yen*. Werner is unusual in the economics field since he tries to base everything he says on real-world evidence, not theory alone.

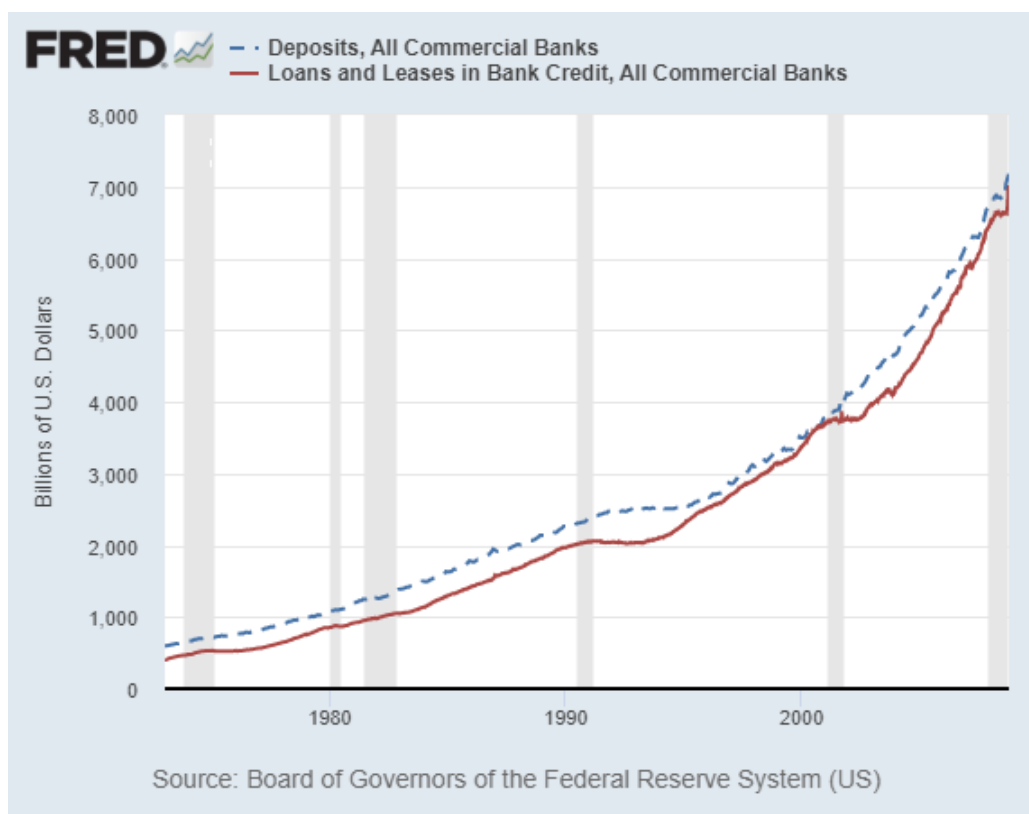
¹¹¹ It is not legal for most central banks to buy bonds directly from the national government. Such a process is called *monetizing the debt* and has always been prohibited in the charter of many central banks. Prohibited why? For fear that it would create runaway money creation and runaway price inflation. If the national government borrows by selling bonds, and the central bank buys those bonds with newly-created money, it is recognized that the national government might use that process continually, without limit. Governments and central banks have now bypassed this protective barrier by having commercial banks buy bonds from the government and then promptly selling them to the central bank. This means they are not violating the letter of the law, but they are, without question, trampling on the spirit of the law. This process of going through the commercial banks also gives those banks a guaranteed profit, something both the commercial and central banks see as a desirable effect.

These new customer deposits become part of the circulating money in the economy. They can be used to purchase real goods and services, or to purchase assets such as stocks, bonds, real estate, cryptocurrencies, and so forth.

Because the owners of these bonds tend to be financial organizations (for example, pension funds or mutual funds) or well-healed investors, they do not tend to use the money to buy real goods and services, they tend to buy financial assets. Thus, the real economy grew far more slowly due to QE than central banks hoped. But the additional money bidding for financial assets drove up the prices of those assets in a very big way, creating bubbles in multiple markets. Astute observers call it the “Everything Bubble.” (My expectation is that as the Everything Bubble pops for good, it will later be known as *The Great Burning* of financial assets.)

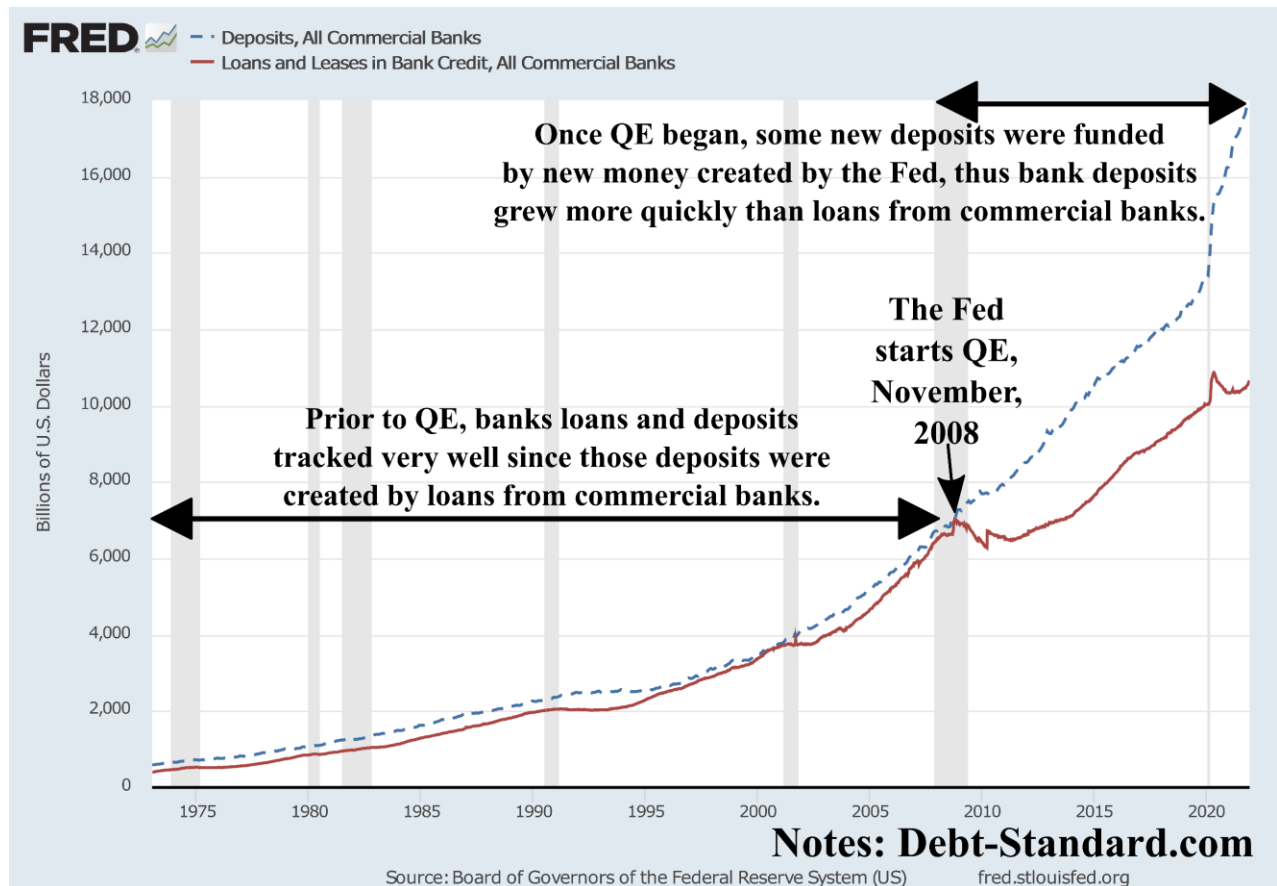
Many have noted the disconnect of the prices of many assets (stocks, bonds, real estate, and so forth) from real world valuations. Many markets have seen manic buying by speculators. Both are strong evidence of bubbles. The net result of QE has been a dramatic acceleration of wealth inequality as national economies remained in the doldrums, but asset markets, owned predominantly by the wealthiest 10% of national populations, skyrocketed in price. The money from QE turned out to be a boon to the already-wealthy and a problem for the “bottom 80%” as the prices of homes (and rent for those homes) and other assets rocketed out of their reach.

In the US, up until October, 2008—that is, before the start of QE—loans by commercial banks and deposits tracked quite closely. This made perfect sense because those deposits were *created* by the loans made by commercial banks. Here is what that looks like on a chart from 1973 to 2008, with customer deposits shown by the dashed blue line, and loans by banks by the solid red line:



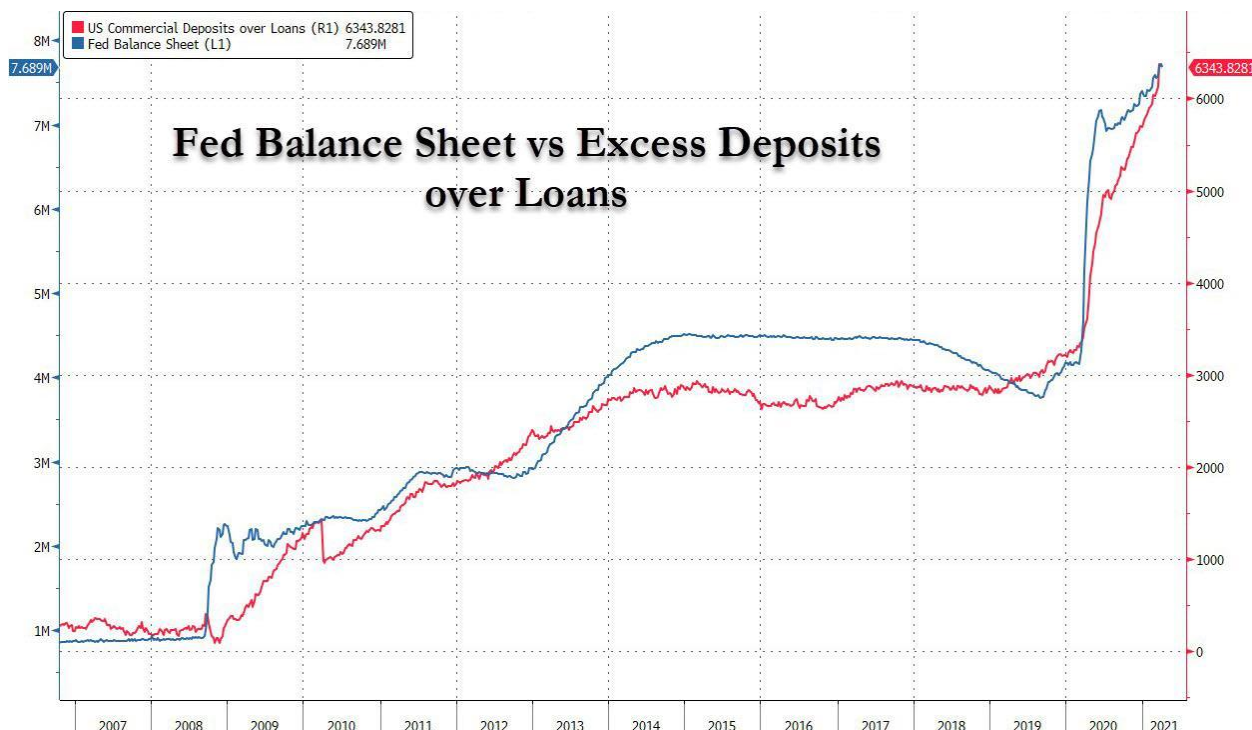
All during the period covered by that chart (and still today), some claimed that it was the Fed, the central bank, that was creating all new money. However, from the start of 2003 through September, 2008, the Fed balance sheet grew by \$174 Billion, while deposits in commercial banks grew by \$2.6 **Trillion**, that is, 15 times faster than the Fed's balance sheet. So clearly, it was not the Fed that was the source of the extra \$2.4 Trillion, it was the commercial banks themselves, creating deposits when they made new loans.¹¹²

But this changed in November, 2008 with the start of QE. If we extend the chart through 2021, we see that, once QE started, deposits consistently grew faster than loans from commercial banks:



¹¹² The comparison goes from 1-Jan-2003 because that is the first date in the Fed's modern data series of its Balance Sheet (series WALCL in their FRED database), to 3-Sep-2008 (series DPSACBW027SBOG in the FRED database) because that is just before the Fed started QE. The desire here is to observe money creation dynamics before QE changed that dynamic. A side effect of that calculation is that it shows clearly that those blaming "the government" for all money creation are not taking into account money creation by the commercial banks.

And the next chart shows the amount by which deposits grew more quickly than loans matches the growth of the Fed's balance sheet, showing that their QE was the source of the expanding bank deposits:



(Source: [zerohedge.com](https://www.zerohedge.com/stunning-divergence-latest-bank-data-reveals-something-is-terminally-broken-in-the-financial-system), "[Stunning Divergence](https://www.zerohedge.com/stunning-divergence-latest-bank-data-reveals-something-is-terminally-broken-in-the-financial-system)": Latest Bank Data Reveals Something Is Terminally Broken In The Financial System)

So this shows that after decades of deposit growth fueled almost entirely by loans from commercial banks, the Fed utilized QE to expand both customer deposits and bank reserves in the banking system. Thus the Fed changed the game, not only creating money for use by banks, as they had always done, but also for use by the public.

Central banks have talked for years about “normalizing central bank policy,” including the ending of QE. But QE was still going strong in 2022, and any reader of this book knows why: In a debt-based money system, debt must always grow. If individuals and businesses are not willing to strongly increase their debt load, or banks can't find a large group of qualified borrowers, then debt will not grow and the economy will go into reverse. In other words, our money system has become dependent on QE. To many observers, it appears that no matter what central banks claim, they will never be able to stop QE, or at least not for long. (In 2023, the Fed *did* finally halt its main QE program. However, the US federal government stepped up its borrowing and buying to more than make up the difference. Thus, the overall amount of debt has kept increasing.)

Wall Street absolutely loves having lots of extra money sloshing around the financial system, especially because most of the money goes to people and institutions that do not need to spend that money, so they pour this extra money into financial assets, driving prices higher on Wall Street. And Wall Street people feel like “the Fed has our back,” that is, every time asset prices begin to crack, the central banks feed even more money into the system. What few realize is that QE is the unequivocal sign that the end of this money system is approaching, that *The Great Burning* is at hand.

Sooner or later, the amount of money created by the central banks could easily overwhelm the amount created by commercial banks. This would change the system in a significant way. When commercial banks are the primary creators of people's money, it is similar to a driver stepping on the gas and the brake at the same time: the new money provides an economic stimulus, but also an economic drag from the borrower having to repay the loan. This helped to have a balancing effect, keeping price inflation at a moderate level. However, once the central bank got directly involved in money creation for people's use, there is the stimulative effect from the new money, but there is no counter-balancing drag from a payback requirement since the central bank can always create as much money as needed at will. It is not a participant in the economy whose need to pay back loans will be a drag on economic activity. So it's all stimulation and no braking, thus price inflation is accelerating, as I write in 2022, in a way that cannot be denied by anyone (except politicians, they always lie about inflation when they feel it will help their poll numbers).

If you would like a detailed explanation of this, that is, how QE money could overwhelm the system, please see [Hyperinflation Update 4/25/21](#) at FOFOA's blog.

The impact of QE in the UK

The three types of debt-based money described above, namely:

- *bank account deposits*, the public's money, created by loans from commercial banks to us;
- *bank reserves*, used only among banks and national governments, created by loans from central banks; and,
- *physical cash*, an IOU from the central bank to the current holder of the cash

are shown on this 2022 graphic from the Bank of England on the web site page entitled "How is Money Created?":



(Source: Bank of England, [How is Money Created?](#), 2022-Apr-10)

The percentages shown of each type of money provide an interesting insight into the discussion under the heading *Since 2008—"Going Direct"* in *Chapter 8: Central banks as money creators*. In this graphic, the BoE says there are more than four times more bank deposits than bank reserves, that is, that commercial banks created over four times more money than the central bank. However, according to UK Prof. Richard Werner, before banks and real estate prices started crashing in the UK in 2007, there were **80 times** more bank deposits than bank reserves. In other words, in 2007, the percentages would have looked more like this:

Notes and coins (cash):	3.0%
Reserves:	1.2%
Bank deposits:	95.8%

This gives you an indication of how much more prominent central banks have become in creating money for the public once they started “Going Direct” with QE.

Appendix M: Understanding central banks

The difficulty of having people understand monetary theory is very simple—the central banks are good at press relations. The central banks hire people and the central banks employ a large fraction of all economists so there is a bias to tell the case—the story—in a way that is favorable to the central banks.

—Milton Friedman, very famous economist, [An Interview with Milton Friedman](#), 4-Sep-2006

This Appendix is a continuation of *Chapter 8: Central banks as money creators*. These issues/questions are considered here:

1. Understanding the actions of central banks
2. Why did major commercial bankers create central banks in the first place?
3. What is meant by “full faith and credit”?
4. Who owns the world’s major central banks?
5. Who created the world’s major central banks? And what’s going on with their connection with war?
6. What’s going on when every time there is a financial crisis, central banks get more power?

Understanding the actions of central banks

Many find the actions of central banks perplexing, but if you understand the origin of central banks, most of their actions are easy to grasp.

The major central banks of the world (for example, the two that have dominated global finance for the last 200+ years, first, the Bank of England, and now the US Federal Reserve) were **created by commercial bankers**. It helps a great deal if you keep this in mind when trying to understand the actions of central banks.

If you see that one of the primary goals of central banks has been to protect the lucrative money creation game of the large *commercial* banks, then the actions of central banks are usually easy to understand. *Without* that idea in mind, the actions of central banks can seem very mysterious.

Just as a single example: When people were unable to pay their mortgages in the financial crisis that started in 2007, the central banks did *not* come to the rescue of the people who were unable to pay their mortgages. They stood by and watched millions of those people default on their mortgages and lose their homes. The central banks *did* come to the rescue of the commercial banks to whom those people owed money. It’s that obvious and that simple.

Why did commercial bankers create central banks?

There are several reasons, but two are major:

First, central banks were conceived as the “lender of last resort,” that is, when banks get into trouble from reckless risk-taking and no one else will lend them money from fear that the risk-taking bank is going bankrupt, the central bank will usually lend them money.

The second is more subtle and perhaps more powerful. Central banking is a cover for the trick of getting people to believe that the *corporate currency* created by commercial banks when they make loans is actually money from the government. Most people (upwards of 85% according to surveys) believe our money comes from the government, so the campaign has been a huge success.

How did they do this? By having the commercial banks create all bank account money (increasingly following 1922 as banker-created money began to replace gold-backed money, and exclusively starting in 1971) but by having the paper currency that people see every day be printed and stamped by the government mint. We know from [Fact 1](#) that paper currency comprises only a tiny fraction of the money supply, with the rest created by commercial banks and kept in electronic bank accounts, but what people *see* is this:

Central banking is a cover for the trick of getting people to believe that the *corporate currency* created by commercial banks when they make loans is actually money from the government.

This tells the truth that this paper Dollar is a debt, an IOU, from the central bank, the US Federal Reserve.



Debt-Standard.com

The truth is told at the top: “Federal Reserve Note” means that this is a printed IOU from the Fed, the central bank of the US. But it also says “United States of America” and has a round green stamp and printed signature from the US Treasury, leading almost everyone to believe that it is “money from the government.” But it’s not. It is from the bank cartel. It is printed by the government mint, but it is distributed solely by the Fed to commercial banks when those banks request cash from the Fed.

Think about how you obtain paper currency when you need some: Most of us use an ATM (Automated Teller Machine) or human bank teller to ask our commercial bank to convert

some of our electronic bank account money—which was created by a commercial bank—into paper currency. So, for most of us, the bank account money comes first, then one obtains paper currency.

This cover—that the money is “government money” or “fiat money”—is *central* to people’s illusions about modern money. Otherwise, they might realize that it is *corporate currency*, that is, credits issued by a commercial bank. A lot of people might have serious misgivings about that—as they should! It is likely they would start to understand why our money system is so good for large corporations since most of the public’s money is created by large corporations ... that are banks.

What is meant by “full faith and credit”?

Some say that the green stamp from the US Treasury also means that the US Dollar is backed by the “full faith and credit” of the US government. The implication is that the US government will “do whatever it takes,” including collect taxes and borrow money (and, in the minds of many, take military action) to maintain the purchasing power of the US Dollar. There is truth in that, but it is also true that the purchasing power of the US Dollar for buying *real* things has fallen by more than 98% since the US began outsourcing money creation to the bank cartel by creating the Federal Reserve in 1913. So what “full faith and credit” actually means is that the US says it will try to maintain the purchasing power of the Dollar *versus other national currencies* such as the Yen, Pound, and Euro—which, like the Dollar, are all debt-based currencies—but definitely not in terms of purchasing power for what is real. In fact, from 2008 through 2021, central banks worked to *create* price inflation, that is, they worked to *intentionally* reduce the purchasing power of the national currencies for what is real.

Who owns the world’s major central banks?

When many hear that the US Federal Reserve has private ownership, they write it off as a conspiracy theory. But here is that idea put forth, not by a foaming-at-the-mouth wearer of a tin foil hat, but by the *Wall Street Journal*, quoting [Andrew Levin](#), a prominent Ivy League professor from Dartmouth College who “worked at the Federal Reserve Board for two decades, including two years as a special adviser to the Chair and Vice Chair”:

“A lot of people would be stunned to know” the extent to which the Federal Reserve is privately owned.

—*Wall Street Journal*, [Former Fed Adviser, Activists Lay Out a Plan for Change at the Fed](#), 11-Apr-2016

Central banks in most countries are not privately owned—though many used to be and still behave as though they are, under the rubric “central bank independence”—but because the US Dollar is the primary currency used in world trade, and almost all central banks hold a substantial portion of their reserves in US Dollar assets, they all have significant dependence on the actions of the Fed.

Let's explore why Levin might be opposed to the private ownership of the 12 Fed regional banks through a quote from Pam and Russ Martens, proprietors of the outstanding *Wall Street on Parade* blog, a web site dedicated to unearthing the far-reaching corruption in our money system:

The Federal Reserve Board of Governors is an independent federal agency... But the 12 regional Federal Reserve banks are privately owned by the banks in their regions. The Fed Board of Governors outsources the bulk of its functions to the Federal Reserve Bank of New York (New York Fed).

Just as the bulk of the Fed's emergency lending programs of 2008 were outsourced to the New York Fed, its emergency repo loan facility of 2019-2020 was also carried out by the New York Fed, and the new \$500 billion Standing Repo Facility will also be conducted by the New York Fed.

Conveniently, the New York Fed's largest shareholders are JPMorgan Chase, Citigroup, Morgan Stanley, Goldman Sachs and Bank of New York Mellon. The banks that own the New York Fed elect two-thirds of the Board of Directors of the New York Fed. The New York Fed also supervises the bank examiners that are stationed at these megabanks. (Read [what happened to former New York Fed bank examiner Carmen Segarra](#) when she tried to write a negative examination report of Goldman Sachs.)

The New York Fed also sponsors "advisory committees" where the banks criminally-charged with rigging markets get to determine "best practices" for their segment of the markets. If this sounds too Orwellian even for this era of crony-capitalism, [read the gory details here](#).

For just how tone deaf the Fed has become to the sensibilities of the average American, read our article: [Despite Its Five Felony Counts, the Federal Reserve Has Entrusted \\$2 Trillion in Bonds to JPMorgan Chase](#).
—*Wall Street on Parade*, [Economist Michael Hudson Says the Fed "Broke the Law" with its Repo Loans to Wall Street Trading Houses](#), 14-Jan-2022

So the private corporation, the New York Fed, tasked with bailouts for and regulatory supervision of the Big Banks, is owned by and has two-thirds of its board of directors elected by those same Big Banks! And its advisory committees are dominated by those same banks. It's a more-than-classic case of the fox guarding the hen house, and a defining example of *conflict of interest*.

After the NY Fed created tens of \$Trillions in new loans for these Big Banks in multiple bailout actions—of which they only revealed any details because of lawsuits brought and won by companies such as Bloomberg—many wondered why the Fed bailed out not only US banks, but also foreign banks operating in the US. [Institutional Investor](#) filed a Freedom of Information request for the shareholder roster of the NY Fed, and the Fed

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complied despite having ignored such FOIA requests in the past, claiming, as only an institution that is *not* part of the federal government can do, that they have no legal responsibility to honor such requests.¹¹³ In any case, the shareholder roster includes foreign banks such as HSBC and Deutsche Bank, helping to clarify why those banks received bailouts from the US Fed.

On its web site,¹¹⁴ the Fed claims that:

The Federal Reserve System is not "owned" by anyone.

As proof, they point out that:

The Board of Governors in Washington, D.C., is an agency of the federal government.

However, farther down the page, they admit the following about the 12 regional Reserve Banks that constitute the rest of the Fed:

...each of the 12 Reserve Banks ... is separately incorporated and has its own board of directors. Commercial banks that are members of the Federal Reserve System hold stock in their District's Reserve Bank.

So even the Fed admits that, while the Board is a government agency, the 12 reserve banks are corporations privately held by commercial banking interests. And we know from the above that the owners are not only US banks, but foreign banks as well.

Who created the world's major central banks? And what's going on with their connection with war?

Founded in 1694, the Bank of England (BoE) was the second central bank in the world (the first was in Sweden, the *Riksbank*, which is now, in 2023, in danger of becoming insolvent so it is requesting a bailout from the Swedish government, that is, from the Swedish taxpayers¹¹⁵). The BoE was founded by merchants who saw an opportunity to become major bankers by lending money to King William for war against France. The English government was nearly broke—England had suffered a half century of civil war—so no one wanted to lend money to that government. And raising taxes was nearly impossible because the king raising taxes beyond people's tolerance was one of the prime drivers of all that civil war.

A group led by William Paterson proposed that they would be happy to lend to the government if they were granted a charter to raise money by selling shares to the public. William and Mary, King and Queen, purchased the most shares of the new bank, making the royal family its largest shareholder. No other joint stock banks were allowed in England until over a hundred years later, in 1826, guaranteeing Patterson's group—and its aristocratic shareholders—a monopoly. "The bank's stature was enhanced by providing funds for England's involvement in the French Revolution and the Napoleonic Wars."¹¹⁶

¹¹³ In other words, the Fed claims to be part of the federal government when it is convenient, but not when such a claim might lead to embarrassment or revelation of illegal activities.

¹¹⁴ *The Fed*, [Who owns the Federal Reserve?](#)

¹¹⁵ *zerohedge.com*, [World's Oldest Central Bank Seeking \\$7 Billion Bailout After Massive Bond Losses](#), 25-Oct-2023

¹¹⁶ *Britannica.com*, [The Bank of England](#)

It's worth thinking about what that created: The royal family and other rich folks who were able to buy shares in the bank would make money every time this new Bank of England lent money to the government for waging war.

Is that why there are only 22 countries in the world that have never been invaded by Britain? And is this one of the main reasons why England's royal and aristocratic families become so very, very rich? And could build these famous (infamous?) houses, television's setting for those Downton Crawleys?



Not only could they commandeer resources from countries forced to become colonies of the British Empire through war, but they would also collect interest from the lending that financed much or all of that nearly-continuous war-making. Wherever the phrase *conflict of interest* is explained, this should be cited as possibly its best example ever.

This map from *statista.com* shows the countries in dark blue *have* been invaded by Britain:



(Source: [statista.com](https://www.statista.com/chart/1000/only-22-countries-have-never-been-invaded-by-britain), [Only 22 countries have never been invaded by Britain](https://www.statista.com/chart/1000/only-22-countries-have-never-been-invaded-by-britain))

Note that those that haven't been invaded—shown in light gray on the map and listed below it—are typically quite remote, relatively small, or were colonies of some other European war power.

As the central bank of the British Empire, the Bank of England was by far the dominant bank of the world.

The Bank of England was nationalized in 1946, after World War 2, as the influence of the British Empire had been taken over by the US. However, the bank formally regained its right to operate independent of government interference in 1997. This is known as *central bank independence*.

The US Federal Reserve

As the influence of the Bank of England dwindled due to the decline of the British Empire, it was replaced in dominance by the US Federal Reserve (“the Fed”).

The Fed was established in 1913. It was the third central bank of the US; the first two central banks had been dissolved due to intense opposition to their tactics.

Coincidence or not, a year later, in 1914, World War 1 began and most countries went off the gold coin standard (to be more precise, they no longer allowed anyone to redeem their cash or deposits for physical gold) for the duration of the war and beyond, until 1922. Some say that war would have lasted no more than four months instead of four years if nations had not been able to massively ramp up money printing and borrowing by going off the gold coin standard to fight the war.¹¹⁷

Again, given that the US has only been “at peace” during 21 years of its 245 year history through 2021,¹¹⁸ it is difficult not to link the global dominance of a central bank with war.

The Fed was started by a very small group representing what were, at the time, the world’s largest banking empires. The group was seven people, six of whom had strong ties to the US and European banking empires of four families: the Rockefellers, J.P. Morgan, the Warburgs, and the Rothschilds. In his book *The Creature from Jekyll Island*, G. Edward Griffin lists the following attendees at the secret meeting on Jekyll Island, Georgia, USA, where the details and agreement for the creation of the Federal Reserve were hashed out. To keep the meeting secret—because the plan would have been vehemently opposed if the public knew it was concocted by the world’s biggest bankers—all seven travelled by train under false names and dressed as men preparing to go fishing:

1. Nelson W. Aldrich, Republican “whip” in the Senate, ... business associate of **J.P. Morgan**, father-in-law to **John D. Rockefeller, Jr.**
2. Abram Piatt Andrew, Asst. Secretary of the U.S. Treasury.
3. Frank A. Vanderlip, president of the National City Bank of New York (now known as **CitiBank**), the most powerful of the banks at that time, representing **William Rockefeller** and the international investment banking house of **Kuhn, Loeb, & Co.**
4. Henry P. Davison, senior partner of the **J.P. Morgan** Company.
5. Charles D. Norton, president of **J.P. Morgan**’s First National Bank of New York.
6. Benjamin Strong, head of **J.P. Morgan**’s Bankers Trust Co.
7. Paul M. Warburg, a partner in Kuhn, Loeb, & Co., a representative of the **Rothschild banking dynasty** in England and France, and brother to **Max Warburg** ... head of the **Warburg banking consortium** in Germany and the Netherlands.

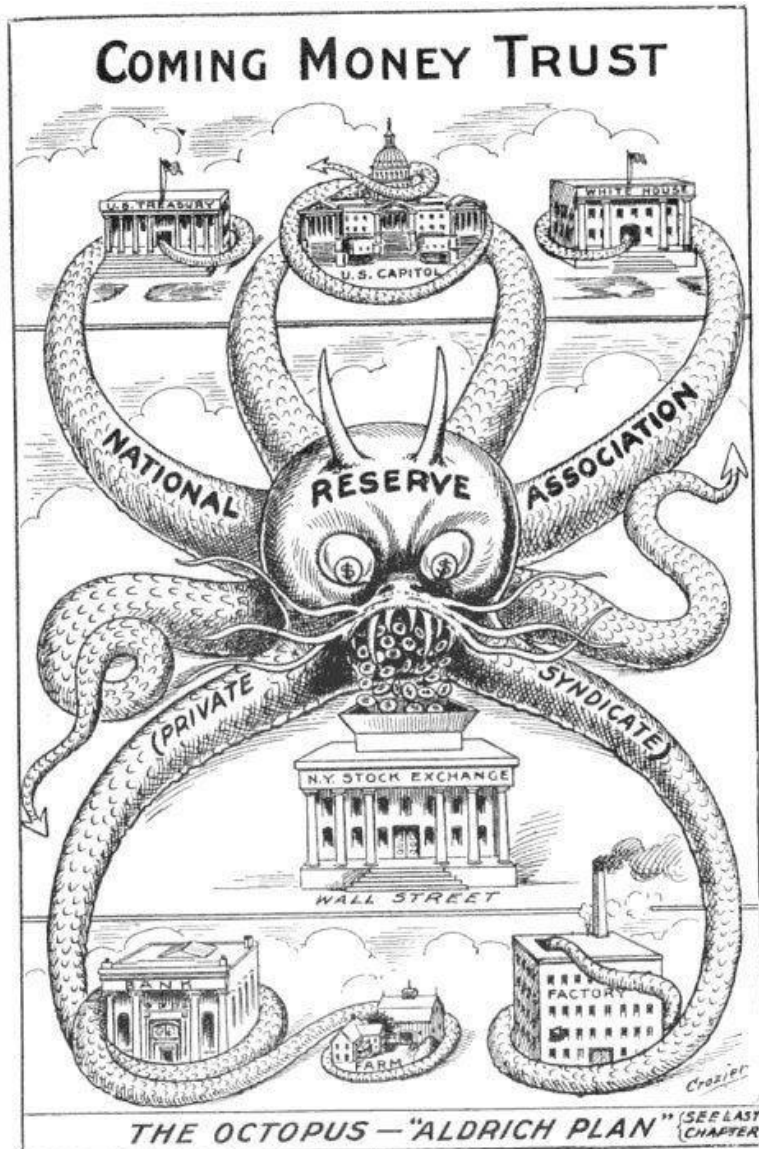
¹¹⁷ Garet Garrett, *A Bubble That Broke The World*, Fraser Publishing, 1996, p. 3.

¹¹⁸ *Washington’s Blog*, [America Has Been At War 93% of the Time – 222 Out of 239 Years – Since 1776](#), 23-Feb-2015

Opponents of the creation of the Fed saw the game clearly and tried to warn people on multiple counts, primarily two:

1. The proposed charter of the Fed would allow commercial banks to create new money, thus replacing US Money (gold) with **corporate currency**, that is, money issued as debt by banks; and,
2. The Fed's power would increase until it dominated the economy.

Such arguments were presented in a book published in 1912 called *U.S. Money vs. Corporation Currency* by Alfred Owen Crozier. Here's a drawing from the book warning about the "National Reserve Association," as the Fed was called before its founding in 1913:



1912 cartoon by Alfred Owen Crozier opposing the "Aldrich Plan" that created the US Federal Reserve. Aldrich was the U.S. Senator who pushed the plan to create the Fed through the U.S. Congress.
(Source: [U.S. Money vs. Corporation Currency](#), 1912)

The warning was prescient. The most famous central banker of all and long-time Chairman of the Fed, Alan Greenspan, said in a TV interview in 2007, “...**there is no other agency of government which can overrule actions that we take.**”¹¹⁹ And no one argued the point, then or now. In a democracy where all branches of government are said to be subject to checks and balances, according to Greenspan, the Federal Reserve Board stands out as an exception.

The US Fed even refuses to allow a full audit of its operations, and most of its discussions are held behind closed doors in what is said to be a democracy.

What’s going on when every time there is a financial crisis, central banks get more power?

We live in a period of financial crises that keep expanding in frequency and global reach. During and after each of those crises, panicked politicians keep granting greater and greater power to the central banks.

One of the “oddities” of these increasingly frequent crises is that we have insider testimony¹²⁰ that one of the greatest bubbles of all time—the late-1980’s bubble in Japanese stocks and real estate that reached such proportions that the real estate in a single block in Tokyo was “worth more” (that is, it had a higher price) than all of the real estate in California combined—was created intentionally by Japan’s central bank, the *Bank of Japan* (BoJ).

In the 1980’s, the most powerful organization in Japan by far was the *Ministry of Finance* (MoF). Any statement or action from the MoF reverberated through global halls of power and markets. But since the Japan bubble burst at the end of 1989, all of that power and more was taken by the BoJ. Now it’s the actions of the BoJ that can cause global markets to quake.

This certainly raises the question about the true origin of the market bubbles we have seen throughout the world since 1971 given that these bubbles always result in more power for central banks. As each bubble builds, some point out such bubbles, but the central banks deny that they are bubbles. Unfortunately, other than the example from *Princes of the Yen*, we’ll have to wait for years or decades before documents are made public that will tell us the truth of the matter.

Central bank actions also support Big

Central banks lower interest rates (the cost of borrowing money) to stimulate growth in asset prices (stocks, bonds, real estate, and so forth) because they say this *wealth effect* is good for the economy, that the wealthier people feel, the more they spend, and spending causes growth. They ignore the fact that the top 10% ranked by wealth own over 90% of the

¹¹⁹ *The NewsHour with Jim Lehrer*, [Alan Greenspan Interview with Jim Lehrer](#), 18-Sep-2007

¹²⁰ See *Princes of the Yen* (an excellent book from which a video was also made) by Prof. Richard Werner, who has held professorships in Tokyo, Germany, and the UK, and who worked for both Japan’s Ministry of Finance and its central bank, Bank of Japan. ([Link to Werner’s web site](#))

income-producing assets in the US, so the wealth effect is almost exclusively for the benefit of the “top 10%.”

However, whenever wages consistently rise, they say this is dangerous and leads to the dreaded “wage- price spiral” and thus potentially uncontrollable price inflation across the economy. So when faced with wage increases, the central banks raise interest rates to dampen economic activity and thus thwart this “dreaded” phenomenon.

So according to them, asset price gains for wealthy asset owners produce a benevolent “wealth effect”, but wage gains for working people lead to dangerous, uncontrollable price inflation.

Despite what central bankers say about this approach, it is a guaranteed method for making the rich richer and the poor poorer. As we have shown, 80% of the society own few or no stocks, bonds, or rental real estate. They derive their income from wages. When wages rise, the central banks act to curtail this growth in wages.

But they take no such action against rising *asset* prices which are owned disproportionately by the rich. Quite the contrary, they take actions to increase the price of assets. ***This directly accelerates wealth inequality.*** It is another major support for *Big* owners.

Presented with this, central bankers simply deny the existence of this obvious result of their actions, at least in public. Occasionally, one of their own fesses up, as this fellow did in 2013:

I can only say: I’m sorry, America. As a former Federal Reserve official, I was responsible for executing the centerpiece program of the Fed’s first plunge into the bond-buying experiment known as quantitative easing [“QE”]. **The central bank continues to spin QE as a tool for helping Main Street. But I’ve come to recognize the program for what it really is: the greatest backdoor Wall Street bailout of all time.**

—Andrew Huszar: Confessions of a Quantitative Easer, Wall Street Journal, 11-Nov-2013.

Thus the poorer are kept poorer, and more become poor.

* * *

If you want to know more about the mechanics of central banking, a good place to start is former Fed trader Joseph Wang’s 2020 book *Central Banking 101*. Help from his web site [Fed Guy](#) has decreased since its inception since most posts are now behind a subscription paywall. But his early posts are still free as I write.

Appendix N: From the Gold Standard to the Debt Standard: Global money systems of the 20th Century

The world had *four* different *official* global money systems just in the Twentieth Century! And those four official money systems were each separated by periods of four to twelve years of unplanned monetary chaos. Because paper money looks roughly the same as it did a hundred or more years ago in many countries, and the name of the currency is the same—Dollar, Peso, Pound, and so forth—most think that the money system hasn't changed. But this is pure illusion.

Here is a list of the official money systems, and intervening periods of monetary chaos, in the Twentieth Century, followed by brief descriptions of those systems. If you don't like reading tables, the gist of it is explained after the table:

Twentieth Century Global Money Systems

Money System #1 ...Up to 1914	<i>Classical Gold Standard</i> or the <i>Gold Coin Standard</i> : Originated at a conference on banking in the year 1445 in Genoa. Some kings, especially Charles VII of France, were experimenting with printing up as much money as they wanted, leading to hyperinflation and a good deal of monetary chaos. A conference of bankers met in Genoa and, after two years of discussion, adopted what we now know as the Gold Coin Standard. There was no international enforcement mechanism other than being able to use one's currency to trade with certain banks and regions because that currency was known to be backed by gold. By 1914, fifty (or forty-nine, depending on who one quotes) countries were on-board voluntarily. In this system, anyone can use gold as money or redeem paper money for gold at any bank.
Chaos: 1914—1922	<i>Every country for itself, to fight World War I</i> : Governments suspend people's ability to redeem paper money for gold. With assistance from their central banks, governments print money and borrow massively to fight World War I. Some say that war would have lasted no longer than four months without the money printing; instead it lasted four years, from 1914 to 1918, killing ten million soldiers and ten million civilians. Prices skyrocketed. A global pandemic, the Spanish Flu, emerged during the final months of the war, lasting over two years, killing 50 million. There is a depression in 1920-21.

Money System #2 1922—1931 *Gold Exchange Standard:* With all of the money printing during the “war to end all wars”—which is what World War 1 was called, until World War 2 started—prices for real goods had skyrocketed. Some countries returned to pegging their currency to gold, but at a lesser weight of gold to reflect those higher prices; others tried to return to the old peg, but with prices already much higher, this was doomed to failure. The world had an economic depression in 1920-21, which few consider today. The money system was in chaos, so a conference intended to address the problem was convened at Genoa in 1922.¹²¹ What they did there was a major alteration of the banking system that had been agreed upon at the Genoa Conference of 1445. This alteration in 1922 was the true start of our modern monetary system: they allowed paper currencies—in this case the US Dollar and British Pound—to act as banking system reserves, 50/50, alongside actual gold. (So this should not have been called the *Gold Exchange Standard*, it should have been called the *Half Gold/Half Debt Standard*.) The excuse they came up with for this was to “conserve gold stocks,” but what they wanted was to keep as much gold as possible in the hands of the central bankers, not in the hands of the people. In Europe, people could no longer exchange paper money for gold unless they had enough money (\$720,000 in today’s money) to exchange that paper money for a 400-ounce gold bar. This was fine for the very rich and big business, but not for anyone else. The second purpose was to advance the process of putting money creation in the hands of the banks. This agreement legislated that some bank credits had the same value as real gold. The French were against this change: French negotiator and money expert Jacques Rueff said this was “a conception so peculiarly Anglo-Saxon that there still is no French expression for it.” It effectively doubled the reserves in the banking system. While no longer true, at that time, bank lending was limited to a multiple of the amount of reserves held by that bank. This increase in reserves resulted in an explosion of bank lending, resulting in the “Roaring Twenties” and lending to speculators for the US stock market bubble that ended in the stock market crash of 1929. Countries borrowed beyond their means, and they were unable to pay back their loans during the 1930’s. That’s the real cause of the collapse of many thousands of banks worldwide in the 1930’s: the default of many countries on their bonds, which were held by individuals and banks worldwide.

¹²¹ For an excellent recap of the Genoa Conference of 1922, see *FOFOA*, [Once Upon a Time](#), 12-Sep-2011

- Chaos:**
1931—1944 Stock bubbles crash in 1929. Many governments default on their borrowings in the early 1930's, bankrupting thousands of individuals and smaller banks worldwide, intensifying the Great Depression. There are currency wars and trade wars, leading to the world's worst shooting war, World War 2.
- Money System #3**
1944—1971 *Bretton Woods System:* Leaders meet at Bretton Woods, US, pushed by the US to accept that only the US Dollar would be backed by gold, at \$35 per ounce, and all other national currencies would be backed only by the US Dollar. England and France strongly object, but to no avail because they were seriously weakened by the war. By the end of WW2, the US had 75% of all gold held by central banks in the world, and in the world of money, the Golden Rule is "he who has the gold makes the rules." In the new system, only countries, not individuals or businesses, could redeem paper US Dollars for gold from the US Treasury.
- Chaos:**
1971—1976 Too many Dollars get created (by both the US government and by foreign banks creating US Dollars from nothing, known as the Eurodollar market, not to be confused with Euros, the currency of the EU). Some countries redeem these Dollars for gold from US. The US realizes it will run out of gold, "closes the gold window" in August, 1971, ending the formal connection of gold and money. National currencies float with respect to one another, changing "value" by the second. **The bank cartel becomes the sole creator of money via lending—the Debt Standard now prevails.** Oil prices quadruple as oil exporting nations, especially Saudi Arabia, balk at receiving paper instead of gold for their output.
- Money System #4**
1976—20??... *The Debt Standard:* The chaos of the "floating currency system" is ratified as the new global money system via what were called the *Jamaica Accords*. Countries are prohibited from using gold to back their money or face exclusion from international banking facilities. **The bank cartel now creates all money by lending—the Debt Standard.** Borrowing by all sectors accelerates. Banks use their newfound power to create hundreds of \$Trillions of *derivatives*, financial instruments whose value is derived from the price movement of some underlying asset and allows people to bet on almost any conceivable economic scenario, finalizing the change in the money system to a casino controlled by the bank cartel.
- Chaos:**
2007—20?? *The Great Burning* of financial assets begins in earnest. Price changes among currencies that used to be called a "currency crisis" become commonplace.

The greatest trick of all time

The gist of the evolution—*devolution* is a better word—from Money System #1 to #4 is that the system started out where economic exchanges were real-for-real, that is, people offered what is real (labor, products, time, energy, and so forth), and received the real (gold and silver) in return. As the 20th Century proceeded, this exchange of real-for-real was increasingly compromised so that, by Money System #4, what people received in return for offering the real was bank credits—that is, debt, or corporate currency—conjured by the bank cartel (commercial banks plus central banks).

So the 20th Century witnessed perhaps the greatest trick of all time: The bankers got people to accept IOU's—that is, debts—created by the bankers as real wealth, tradeable wealth! Most money was now issued by corporations, not people and governments tapping a resource from nature. The effect of this has been one of the world's great tragedies: the value of people's labor, energy, know-how, and time—which, along with nature, create the real wealth in our world—have been minimized as something you can buy for a certain amount of money—and not very much money, because those who create money make sure that most of it goes to their favored groups. The result is a world where people who shuffle money make ten to a thousand times more than people who do what keeps us alive. The speculative trader of cocoa futures—whose work adds exactly nothing to the real wealth of the world—can get rich, while the people who grow cocoa struggle to make a living.

So the 20th Century witnessed perhaps the greatest trick of all time: The bankers got people to accept IOU's—that is, debts—created by the bankers as real wealth, tradeable wealth!

Please also notice that, summing up the years of chaos, a full quarter of the 20th Century had no official money system at all! The periods of *Chaos* above were times of “every country for itself.”

So the issue is not that “you can't change the money system,” as some claim, it's what the next period of possibly dangerous chaos will bring, and what the next official money system will look like. Some monetary elites (the Davos crowd, known as the World Economic Forum) want a single world currency system controlled by them, with everything digitized so that all money transactions can be tracked and, if desired by the elites, prevented. But try getting all countries to sit down right now and agree to a new money system. Try to get even two political parties in the *same* country to agree on what a new money system should look like. Best of luck! So major change will almost certainly come, as it has in the past, only via major crisis. And if nations cannot agree, there may be no centralized, official money system at all; it may be a variety of systems, a far more decentralized, “multi-polar” approach.

But one thing is certain: the current global money system will pass. It is passing as we speak. In this set of books, this is called *The Great Burning* of financial assets.

It could be argued that the advent of Quantitative Easing (see *Appendix L: Quantitative Easing*) is already ushering in a change to a new money system with the public's money being increasingly created by central banks rather than commercial banks.

It's also important to understand the dangers of the periods of monetary chaos. In the 20th Century, those periods of chaos saw two world wars, the Great Depression, war in the Middle East and the oil embargo of 1973-74, raging price inflation in the 1970's, and so forth. Since all the signs point to another upcoming period of monetary chaos, people might wish to make preparations for such a time. Focusing on what is real rather than what is ephemeral, in all spheres of life, will soon be shown to be the path of wisdom here. As the more astute financial observers such as Zoltan Poszar have recently been stating, "you can't print oil or food."

If your interest is protecting yourself and those you love, get real!

The point here is not to frighten. The point is to say that there is a new global money system developing as I write. If you want a say in how that works, getting truly informed on the topic is the first step. If your interest is protecting yourself and those you love, get real! To put it bluntly, if you spend most of your time staring at screens and paper, develop one or more real world skills. I can suggest gardening is a wondrous instructor and benefactor, but there are so many real skills that are valuable to people, and many of them are very interesting and a lot of fun as well. That's right: Work as fun!

Keep these in mind: Get real! Value the valuable! (That is, value what is truly valuable to you and others, not the ephemeral.)

Appendix O: A circular system

Credit is a system whereby a person who can not pay gets another person who can not pay to guarantee that he can pay.

—Charles Dickens, *Little Dorrit*, 1857

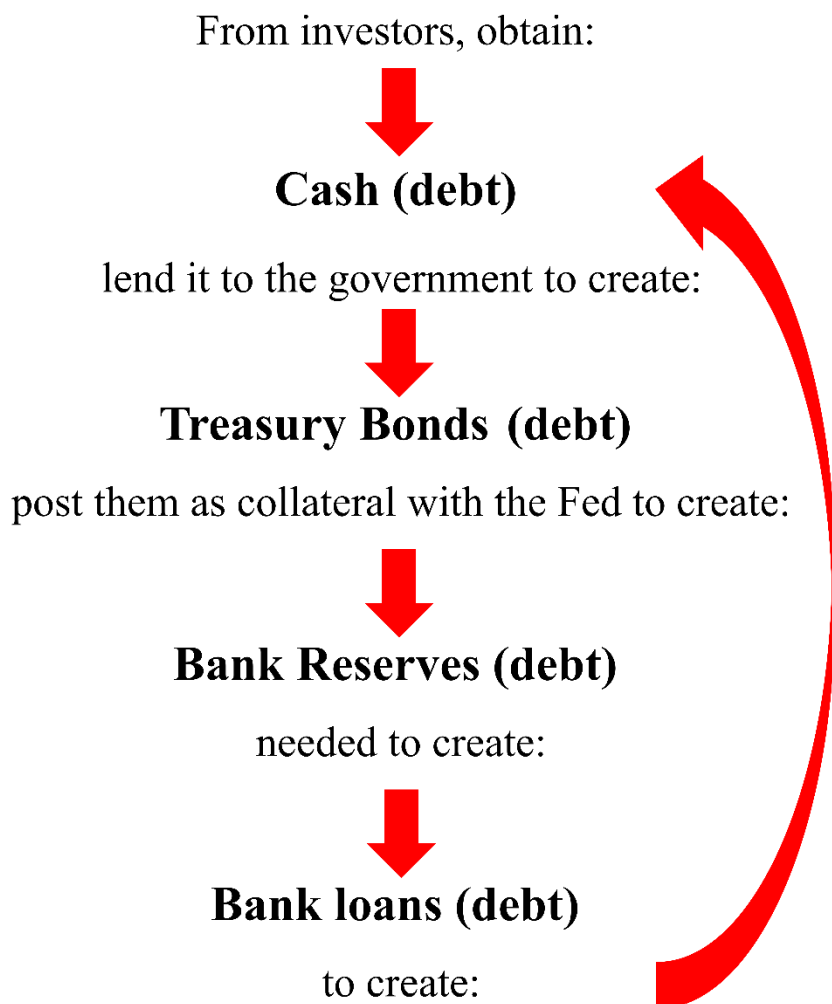
Anyone who takes a deep dive into the nature of our money system concludes that our money system is circular.

If you want to start a bank so that you can create money via loans, in addition to obtaining approvals from a squadron of regulators, you do so by raising money from investors and then lending some of that money to the national government to buy Treasury securities (called *Treasury Bonds* or *T-Bonds* in the US). You then post some of those T-Bonds as collateral to obtain a loan of Bank Reserves from the central bank. To be a commercial bank, you need those Bank Reserves to participate in the national banking network because it is Bank Reserves that move among banks when money moves between banks. You declare that the rest of the T-Bonds are your capital, or a cushion that governments require banks to have in case they need to sell something to cover loans that go bad. Once you have your Bank Reserves and capital cushion, then you can start creating money for people and businesses by making bank loans to them.

So this sets a circular process in motion. Commercial banks make loans to people, creating the public's money that circulates in the economy. Some of that money is loaned to the national government, which issues T-Bonds that are promises to pay the money back later and to pay some interest. Commercial banks need to buy some of these T-Bonds to post as collateral to obtain a loan of Bank Reserves created from nothing by the central bank so that the commercial bank can participate in the national banking network, enabling these commercial banks to create money to lend to the public ... and on it goes:

The Debt Standard

(How to create a bank)



How to create a bank demonstrates the circular nature of our debt-based money system.

Debt-Standard.com

Is the circle backed by something real?

If you are wondering whether there is something real that sits behind that circle, there isn't. Gold and silver used to connect money to the real, as backing for that money, but that ended completely in 1971. Now it's all just different forms of debt. And while most think of collateral for a loan as something real, like a house, car, or factory, this circular system readily accepts some types of debt as collateral for other types of debt. In fact, government bonds are the preferred collateral, the so-called "risk-free asset," that banks in the Eurozone

and now banks in the US are finding out are definitely not risk free. (Silicon Valley Bank collapsed because of an over-reliance on US government bonds that lost market value in a very big way as the US Federal Reserve raised interest rates in 2022, so saying those bonds are “risk free” is BS. SVB’s reliance on government debt resulted in the second largest bank failure in US history—at least as of 2023.)

Writer FOFOA described this well in an interview:

Ultimately, after 90 years, we have arrived at our inevitable destination: the intractable problem of an unimaginably intertwined, interconnected Gordian knot of purely symbolic obligations. A Gordian knot is like an unsolvable puzzle. It cannot be untangled. The only solution comes from “thinking outside the box”. You’ve got to cut the knot to untangle it.

—FOFOA, *DNAIndia.com*, [An interview with the mysterious, reclusive ‘Fofoa’](#), 18-Mar-2018

It is also worth noting that, to be in business, commercial banks are forced to buy government debt, creating a guaranteed market for that debt. It’s very much like governments demanding that taxes be paid in the national currency, creating guaranteed use value for that currency.

Some claim that the “wealth of the nation” backs each national currency, but the claim does not ring true. Throughout history, most nations with money not backed by something real have expanded the amount of money and/or debt at a pace well beyond the growth of the real “wealth of the nation,” rendering the debt unpayable and the money worthless. So such “backing” is a temporary illusion. A nation’s money can easily be disconnected from its real wealth (people’s work and energy, land, natural resources, and so forth).

Others claim that money creation via debt “monetizes the credibility of the borrower,” that is, the credibility, or character, of the borrower is turned into money. This has the same type of problem: With debt-based money, debt must expand exponentially, while the idea of an exponential expansion of the “credibility of borrowers” does not make the slightest bit of sense. So while lending might start out with a connection with character, with debt-based money, ultimately the supply of money must expand beyond that or debts will not be repayable and the system will collapse.

Appendix P: Debt Jubilees, Past and Present

As discussed in *Chapter 27: Debt jubilees, formerly for the poor, are now for large organizations*, there were many instances of general debt jubilees in the BC era. When debts were recorded on clay tablets, these jubilees were celebrated by the smashing of the tablets or by washing the record of debt from them. As explained, jubilees could be a fairly simple affair when money was something real such as a weight of gold, silver, or barley; debts were canceled but the money remained, and thus, economic activity could still function in a normal manner. However, when money is debt, a general debt jubilee is not at all simple since a widespread canceling of debts would also be a widespread canceling of money.

However, as shown in *Chapter 27*, there *are* modern jubilees that benefit multi-national banks.

The jubilees of old brought debt relief to the poorer groups in society; modern “jubilees” tend to bring debt relief to large financial institutions. The authorities claim that debt relief for the largest banks benefit the society as a whole by keeping “globally systemic important banks” (G-SIB’s, also known as “too big to fail,” or “too big to jail”) afloat.

Let’s take a look at the instructive jubilees from the BC Era.

There were some “scholars” who relegated these stories of debt jubilees from the pre-Christian era to the realm of fable, claiming that they could *not* have taken place because they would have wrought societal chaos. The lack of evidence available at the time gave them permission (in their view!) to make a definitive claim when an honest assessment would have been for them to say, “We don’t know.” But they were promoting a particular narrative, and calling jubilees “fables” fit the narrative, so that’s what they claimed.

However, archaeological finds in the last several decades in the Middle East, and subsequent translations of these finds, have shown debt jubilees over a 2,000 year period in Sumer, Babylon, Turkey, Egypt ... in fact, throughout the Middle East, with the earliest verifiable examples starting around 2400 BC. The claim that debt jubilees were “fables” has been shown to be the actual fable. It turns out that the Old Testament jubilees of the Israelites were the continuation of a tradition of societal debt forgiveness:

In 1792BC, the self-proclaimed King Hammurabi of Babylon forgave all citizens’ debts owed to the government, high-ranking officials, and dignitaries...

Hammurabi’s jubilees were part of a long line of debt cancellations that can be traced back to Mesopotamia as long as 2400BC.

Historians have counted around *thirty episodes* of general debt cancellations from 2400 to 1400 BC, noting they were occasions of great festivity which often involved the physical destruction of the tablets on which liabilities were recorded.

— *The Telegraph, UK*, [The biggest debt write-offs in the history of the world](#), 2-Feb-2015

Notice that the poorer people in the society were forgiven debts they owed to the elites! How times have changed.

The kings of Sumer and Babylon (mostly modern-day Iraq) understood the danger of the societal imbalance that resulted from having a small class of very rich creditors and a large class of poor debtors. They saw their debt jubilees as restorations of natural order, economic order, freedom, and equity.¹²²

In the same spirit, here is a law from the Code of Hammurabi that he claims he received from the Sun god:

If any one owe a debt for a loan, and a storm prostrates the grain, or the harvest fail, or the grain does not grow for lack of water, in that year he need not give his creditor any grain, he washes his debt-tablet in water and pays no rent for this year.

Try getting a modern banker to accept such conditions when they grant a loan. Of course, they would not. They would seize the farm if the farmer defaulted. Or insist on a government guarantee program so that they would be paid in any case. Biblical and modern historical accounts portray Babylon as primitive, but it seems they had a more advanced understanding about debt than we do.

So we “progressed” from debt jubilees in the pre-Christian era to the debtor’s prisons of the times of Charles Dickens (1812-1870). Some progress! And debtor’s prisons still exist in some countries.

One of the seminal events in that “progress” happened around the year 10 AD (or 10 CE, for those who prefer that designation). Up until that time, the Jews honored the biblical imperatives that compelled the forgiveness of monetary loans to other Jews every seven years and the general jubilee, including the return of encumbered lands, every fifty years. Around 10 AD, Jewish Rabbi Hillel codified the *prosbul*¹²³ through which creditors could use the courts to collect debts even after the seventh year, the year of general loan forgiveness. The effect was the voluntary giving up by the debtor, as a condition of obtaining the loan, of the right of loan forgiveness every seven years.

Hillel justified this saying that, without it, the poor were having a very difficult time obtaining loans as the seventh year approached. However, judging from the absence of jubilees following that time, the effect was to nullify the biblical provisions for debt relief. After Hillel’s declaration, it’s very likely that it became increasingly difficult to obtain a loan without “voluntarily” relinquishing one’s biblical right.

¹²² There are also claims that the kings needed soldiers to fight wars for them and that debt slaves made rather ineffective soldiers because the reward of victory was—back to slavery. Also, “taxation” of the poor was levied, at that time, in required participation in public works projects. Perhaps kings also found out that farmers who owned their land produced a lot more food than slaves working on land owned by the rich.

¹²³ *Jewish Encyclopedia*, [Prosbul](#): “a declaration made in court, before the execution of a loan, to the effect that the law requiring the release of debts upon the entrance of the Sabbatical year shall not apply to the loan to be transacted”

As an aside, the rabbinical view¹²⁴ is that the reason for the biblical protection of debtors was so that people would serve God and not end up serving men because they owed those men money. So much for that in our debt-ridden world!

In our modern “sophisticated” world, jubilees aren’t for the poorer segments of society, as they were in the days of old, now jubilees are for banks! When a national banking system goes into crisis mode, the central banks replace debts held by banks on which they are unlikely to ever be repaid with bank reserves or very low-cost loans.

But if they could have debt jubilees in Mesopotamia, why can’t we have one now? The answer is simple: In those days, money was a physical plane good, real wealth. For example, in Babylon, barley and silver both functioned as money. Loans could be paid using *weights* of either.

So when loans were forgiven, the money—silver and barley—remained and the economy continued functioning. Only the indebtedness—who owed what to whom—was gone. Some people had fewer assets as a result; others were spared having to pay their debts.

However, currently, our money *is* debt. ***If all debts were forgiven, there would be almost no money***, except perhaps for the very small percentage of money that exists in physical form as paper and coin, and perhaps cryptocurrencies.

Let’s think this through: Let’s say you deposited \$1,000 in a bank. The bank now owes you \$1,000. So, if all debts are forgiven, the bank now owes you nothing. And no one owes anything to the bank. And any business with funds in the bank would be in the same position as you—the bank would now owe them nothing. So they would have no money in their accounts to pay employees, buy materials, pay utility bills, and so forth.

Even if the jubilee were only for those who owed money to the bank, and the bank still owed depositors, the bank would very quickly expend what little money it had on hand to pay its expenses. It would quickly go out of business since it would have expenses but no income—no one would be paying off their loans since those loans had been forgiven.

All that would be left is the cash and coins in wallets, pockets, and vaults at the moment of the jubilee. Without operating banks, and thus no use of debit and credit cards, checks, wire transfers, and so forth, very little business would be transacted. Most jobs would be gone in a heartbeat. Most of the economy would shut down. No taxes would be paid, so many government services would vanish. Utility services such as electricity and phone would be erratic at best and would likely degrade from there. Barter would emerge, but it would likely be clumsy, at least at first; rural areas, where many exchanges of goods already take place in barter-like fashion, would fare better than cities. Recognizable gold, silver, and possibly platinum coins would be highly valued because most people would be willing to accept them in exchange for goods or labor. Cryptocurrencies, such as bitcoin, might be highly valued, but with failing internet infrastructure, their use would likely be erratic at best, perhaps impossible. The potential for dangerous chaos would be high.

Needless to say, the authorities would not undertake such a debt jubilee voluntarily or intentionally, though what is described strongly resembles a national currency collapse. Such currency collapses have happened many times—not by decision, but by financial accident.

¹²⁴ *Jewish Encyclopedia*, “[to discountenance the idea of servitude to men](#).”

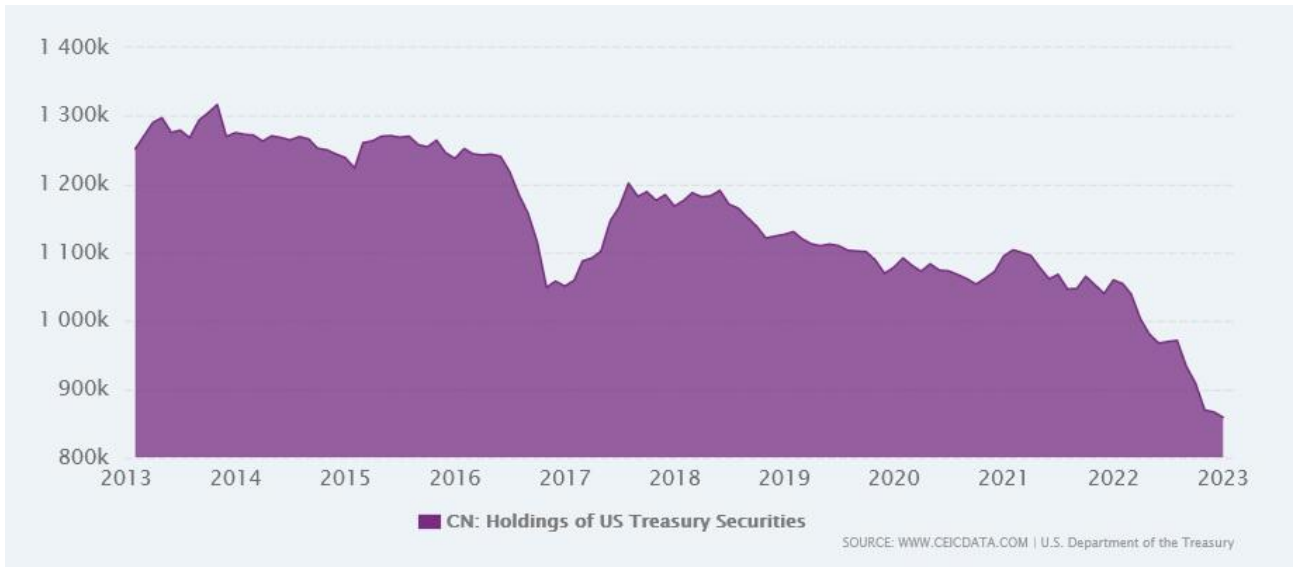
Government gives itself a jubilee

One type of debt jubilee we might actually see is one in which governments try to give themselves a debt jubilee. They could claim that the government represents the people and therefore it was actually for the good of the people despite the fact that it would be obvious to most that the jubilee would strongly favor those currently in power.

How would they carry this out? Some say by having their central bank print money from nothing, use that money to buy the debt of the government (government bonds) on the open market, and then agree with the government to allow the bonds to be canceled. Another way might be that they would have the central bank print up money to buy perpetual zero coupon bonds with zero interest from the government. These would be bonds that paid no interest and would never have to be repaid.

Either way, this could cause a host of problems, not the least of which is this: would the public (especially foreign bond buyers who hold over \$7 Trillion of the \$34 Trillion of current US government debt) want to buy future debt from this government when they know the whole process is a sham, that is, the government borrows from the public and then the central bank prints money and cancels the debt, or that the “debt” is fake, that is, it never requires any repayment? Why pretend that it is borrowing at all? It’s tantamount to simply printing currency. It could rapidly undermine confidence in the currency. When the public loses confidence in a currency, the game can accelerate into hyperinflation rather quickly as people consider the money to be a “hot potato,” that is, they’d rather buy or hold anything else except that currency. And hyperinflations cause governments to topple.

If you think this is a trivial concern, please consider that quantitative easing (see *Appendix L: Quantitative Easing*) has some aspects of such a jubilee. The central bank prints up new money to buy the debt issued by the national government, though the government at least still pretends that it will pay the borrowings back with interest. Still, it clearly spooks foreign buyers, for example, see the next chart that shows that the Chinese government used to own over \$1.3 Trillion of US government debt, but that they have been sellers rather than buyers of that debt for the last ten years, currently holding \$778 Billion, that is, 40% less than they used to:



(Source: *CEICdata.com*, [China Holdings of US Treasury Securities](#))

Another problem, one which is already percolating in the minds of many, is how come the central bank is willing to waive their magic monetary wand and have the debts of big shots, and only big shots, forgiven? What about regular people? What about small businesses? What about struggling farmers who, after all, produce the very food we eat?

More and more people realize that when the bankers or the war machine want money, the money magically appears. But when regular folks need money? Then it's "sorry, there isn't enough money available. We'd love to help you, but we already have too much debt so you aren't going to get any help." The authorities are flirting with disaster as anger builds in people about this.

Summary

Let's conclude by reiterating the short answer about jubilees: When money is debt, a debt jubilee destroys money. It might very well happen by accident, but the authorities will never choose it intentionally—except they might stage a jubilee for themselves, though that could easily be seen as a sign of desperation and destroy confidence in the currency and the government itself.

Appendix Q: How and why governments understate price inflation

A nickel ain't worth a dime anymore.
—Yogi Berra (1925-2015), Catcher, New York Yankees

According to the distortions known as economic statistics from the US government, TVs dropped 98% in price from 1996 to 2016. If true, that would mean that if the average TV cost \$400 in 1996, then one could buy an equivalent TV for \$8 in 2016. Here's an ad for low-cost TVs published for the "cyber week" super-sale (likely the lowest prices of the year) in 2018 that shows the average lower-priced TV cost \$415:

The advertisement features four televisions from Sharp, Samsung, and LG, each with its price and savings highlighted. The Sharp 50" Class - LED - 2160p - Smart - 4K UHD TV with HDR is priced at \$329.99, saving \$70. The Samsung 65" Class - LED - NU7100 Series - 2160p - Smart - 4K... is priced at \$749.99, saving \$150. The LG 55" Class - LED - UK6090PUA Series - 2160p - Smart - 4K... is priced at \$399.99, saving \$150. The Sharp 40" Class - LED - 1080p - HDTV is priced at \$179.99, saving \$20. The ad also includes the Best Buy logo, snowflake icons, and the slogan "Go ahead, gift away."

Brand	Model	Price	Savings
Sharp	50" Class - LED - 2160p - Smart - 4K UHD TV with HDR	\$329.99	Save \$70
Samsung	65" Class - LED - NU7100 Series - 2160p - Smart - 4K...	\$749.99	Save \$150
LG	55" Class - LED - UK6090PUA Series - 2160p - Smart - 4K...	\$399.99	Save \$150
Sharp	40" Class - LED - 1080p - HDTV	\$179.99	Save \$20

And we all know that there are TVs for sale now that cost several thousand US Dollars. So where are those \$8 TVs? Clearly, they don't exist. They are figments of the imaginations of statisticians pressed by their political appointee bosses to jump through numeric hoops to make it appear that prices are not rising as fast as they actually are.

Why? Because governments have three compelling reasons to understate actual price inflation experienced by people:

1. Most government pensions programs (for example, Social Security in the US) are *indexed to inflation*, that is, pension payouts rise each year in alignment with the

official pronouncement of the general rise in prices. In the US, this rise is said to be captured by the CPI, the Consumer Price Index. The lower the CPI, the less the government has to increase payouts to those receiving pension benefits. It helps owners of businesses as well in negotiations with workers when published price inflation statistics appear low.

2. Governments are the world's largest borrowers of money. They borrow by selling bonds, that is, promises that if someone lends them money now, they will pay them back with interest at some point in the future. Those who lend money to governments, that is, buyers of these bonds, want to earn a rate of interest that is higher than the reported rate of price inflation, otherwise they will actually lose money over the life of the bond as the currency loses purchasing power. So if the government can convince people that price inflation is low, they can pay a lower rate of interest on their borrowing, on their bonds. This can save major government tens to hundreds of \$Billions per year.
3. Economic growth is said to be captured by the statistic GDP, Gross Domestic Product. First, GDP is calculated based on the total Dollar amount of economic transactions. Then, the current measure of price inflation is subtracted from that amount for the final result, what people call *Real GDP*. The reason for this subtraction is that a general rise in prices could easily appear to be real growth of economic activity when all that happened is that the price of everything increased. For example, if the prices of everything rose by 5% one year, and the initial calculation of GDP increased by 5%, that would indicate that the apparent economic growth was due strictly to price increases, not to any actual growth in real activity.

In other words, the lower the increase in prices the government can claim, the better the economy will *appear* to be in terms of growth. If the growth of all transactions was 6% and the government can claim that prices rose only 2%, then real growth was a very respectable 4%; but if the price inflation rate was 5%, then real economic growth was only 1%, something most consider to be *stall speed*, not growth. And governments always want to claim that their especially "enlightened" policies are delivering fabulous economic growth, even in the face of massive evidence to the contrary, because they rely on the captive media reporting, and their supporters believing, anything they say whether or not it's true.

So the way price increases are calculated is very important to the government narrative machine. In the US, after extremely embarrassing price inflation statistics in the 1970s that came after the US broke the link between the US Dollar and gold, beginning in the 1980s, they devised several ways to manipulate the calculation of price inflation so that it looked "better," that is, lower than it really is.

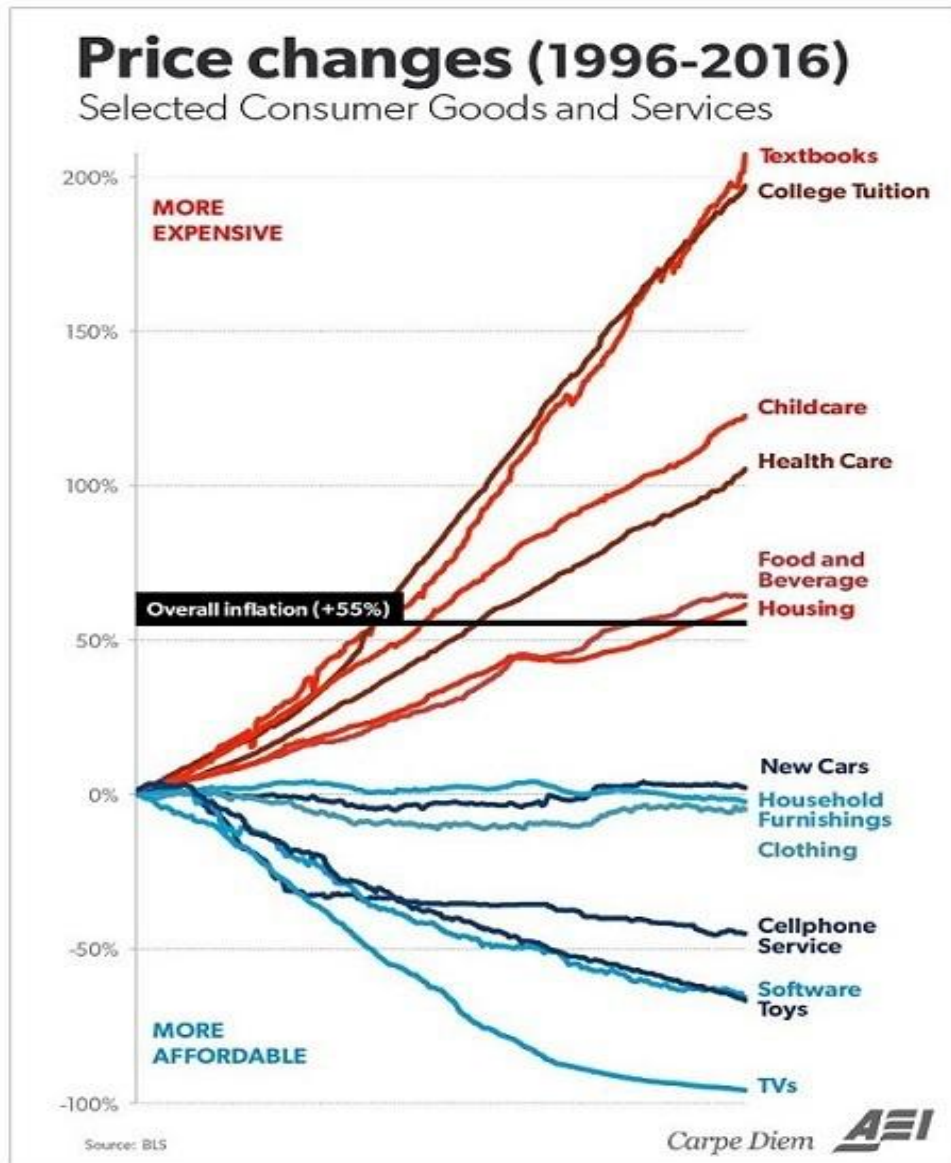
Just so you can understand just how far they have gone in this manipulation (also known as lying), let's describe just one tactic they use known as *hedonic adjustments*, and you'll get the picture.

Hedonic adjustments attempt to quantify how much the *quality* of a product has improved in calculating whether the price of that product actually rose or not. So if anti-lock brakes were added to an automobile, then the government might decide that the \$800 increase in the price of the car was for the anti-lock brakes and therefore the price of the car didn't rise at all. Statistically, that is. Anyone who tried to buy the car was faced with an \$800 increase price.

The next chart looks mighty squiggly but it's actually straightforward. It shows how the US government calculated the price change for various goods and services which are components of the CPI, from 1996 to 2016. They claim that, overall, prices rose 55% over that period. At the top right of the chart, they show that textbooks and college tuition rose

about 200%. And at the bottom, as mentioned above, they show that the price of cell phone service dropped by almost half (did yours?), and TV prices fell about 98%!

(Source: [Carpe Diem AEI](#))



In fact, TV prices really haven't dropped at all. But the US government counts TV prices as part of the CPI and says those prices fell 98%. How? By saying that TVs increased in quality: resolution, color intensity, connectivity, power consumption, and so forth. That's a perfect example of a hedonic adjustment that contributes to the calculation that says prices fell or didn't rise much because the buyer got "more for their money." What's left out is that a TV buyer had no choice to buy a TV whose price was 98% lower--such TVs don't exist.

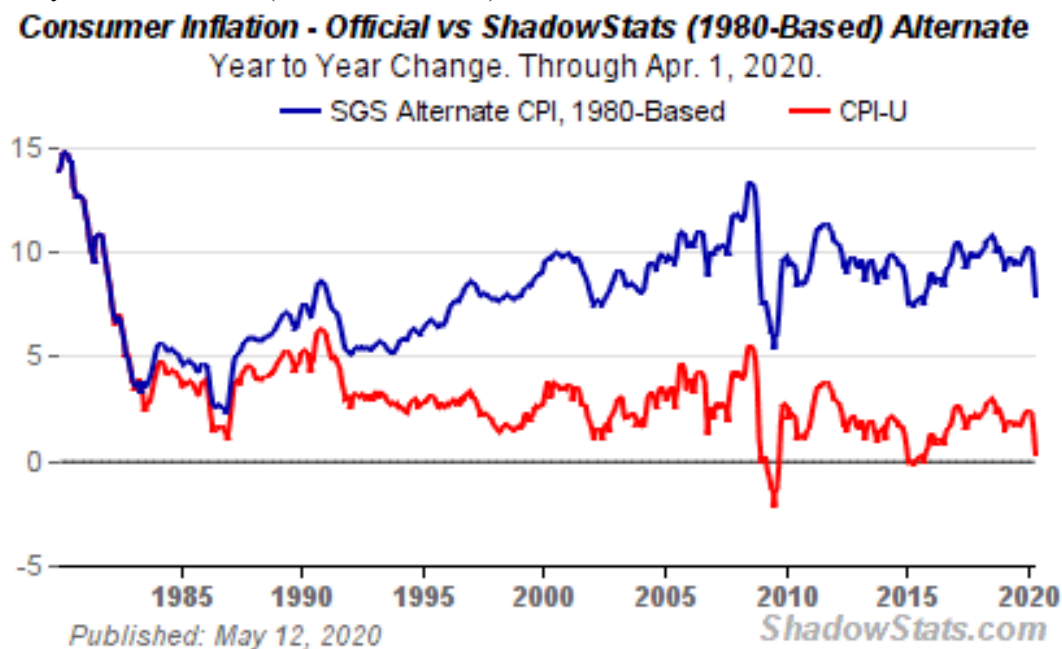
Furthermore, based on people's experience, it's relatively easy to make the case that TVs are in fact a lot more expensive than they used to be because of a massive decline in their longevity. It used to be common for people to own a single TV for 15 to 20 years. During that time, many TV parts were replaceable, so TVs could be easily repaired. Now, TVs typically break down in 3 to 4 years and can only be repaired at great expense, an expense so

high that it is normally not worth it, so one buys a new TV as we all are encouraged to become part of the Landfill Economy by throwing out the old TV.

Prices for cars have the same problem as TVs. The chart above shows that the US government says that car prices were virtually flat from 1996 to 2016. But anyone who bought a car during that period knows this is nowhere near the truth.

A colleague of Charles Hugh Smith named Bill Rice Jr. went to a library in New Jersey to examine ads for the cheapest new car one could buy over a 30-year period.¹²⁵ What he found was that, on average, the price for the cheapest cars *tripled* over that time. So how could the US government be claiming that car prices didn't rise at all? It's those hedonic adjustments again: they claim the cars had better tires, radios, brakes, mileage, and so forth, thus delivering a higher standard of living, "therefore" their actual cost didn't rise at all.

John Williams of ShadowStats.com was serving the business community as a forecaster and he said that, starting in the 1980's as the US started "adjusting" price inflation statistics down (and thus GDP up), his customers began to complain that they could no longer forecast well for their business because the government statistics no longer correlated with trends in their own business. So Mr. Williams did the work himself to continue calculating US price inflation the way the government used to calculate it, and he has done so ever since. Above is his chart of price inflation the way the US used to calculate it (the upper, blue line) versus how they calculate it now (the lower, red line):



(Source: Chart Courtesy of [ShadowStats.com](https://shadowstats.com))

Notice how both lines were the same up till about 1983 and then the red line (the new way of calculating price inflation) persistently diverged from the old method as the US added more and more adjustments. It shows that in 2020, the difference is about 7% per year! It shows that for the last 20 years, the old method said that prices were rising about 8% a year; the new method claims prices are rising about 2% or 3% per year over that time period.

¹²⁵ Charles Hugh Smith, *OfTwoMinds.com*, [No Matter How Much Money the Fed Prints, We Still Can't Afford Nice Things](https://www.oftwominds.com/2020/01/15/no-matter-how-much-money-the-fed-prints-we-still-cant-afford-nice-things/), 2020-Jan-15

That difference is massive. If a pensioner was receiving \$1,000 per month in the year 2000, then using the new CPI calculation method, that pensioner would be receiving about \$1600/month in 2020. However, using the old CPI method, that person would be receiving \$4,600/month by 2020, almost three times as much as under the new method! So the US government is saving hundreds of billions of dollars by using that new calculation method, and pensioners are receiving that much less. This rise in the cost-of-living is applied to many private-sector and government salary and pension negotiations, so the impact is widespread.

Also, since the CPI percentage is subtracted from the initial GDP calculation, the old CPI calculation would reveal that there was a decline of GDP in many years rather than the positive growth reported by the US.

Adding further insult, price inflation measures how much one's currency is losing in purchasing power each year. So if price inflation is 2%, a dollar buys 2% less than it did last year; if price inflation is 8%, then 8% less! At 2.5% price inflation, moving from the year 2000 to 2020, one Dollar would purchase 60 cents worth of goods by 2020. But at 8% price inflation, that Dollar would buy only 19 cents worth of goods in 2020! Now you can see what's meant above that the difference is massive.

So which measure of price inflation is correct? One group that tried to find out publishes the Chapwood Index.¹²⁶ They do so by tabulating the price of the 500 most-purchased goods and services in the US in the 50 largest cities and then they calculate the price differentials over time. What they found, for example, in 2019, was that prices across the US rose by 9.6%¹²⁷ while the government was claiming that price rose by only 1.7%! Chapwood also shows that prices rose by an average of 8% per year over the last five years (as of 2019).

Critics of these higher price inflation statistics say they can't possibly be this high because we have had real economic growth in most years as proved by increases in the number of jobs available. However, even they admit that, at least in the US, the expansion of employment has been *far* larger in low-paid jobs than higher-paying jobs as many of those higher-paying jobs were shipped overseas.

Rational commentators such as John Mauldin believe that, based on amounts that are not statistically manipulated, such as tax receipts of the US government, the truth lies somewhere in between the US government's understatement of price inflation and the statistics from Chapwood and Shadowstats. In other words, they believe that some of the adjustments to the price inflation statistics are warranted, while others go too far. Still, one has to wonder how much of those increases in tax receipts are due strictly to the general increase of the prices of everything that are *not* captured in the CPI.¹²⁸

¹²⁶ [The Chapwood Index](#)

¹²⁷ *CISION PR Newswire*, [U.S. Consumer Prices Rose an Average of 9.6 Percent on Annualized Basis in First Half of 2019](#), According to Chapwood Index, 10-Oct-2019

¹²⁸ Thus this quote maintains its currency, "There are three kinds of lies: lies, damned lies, and statistics." The quote was popularized by Mark Twain, but no one is sure of its origin.

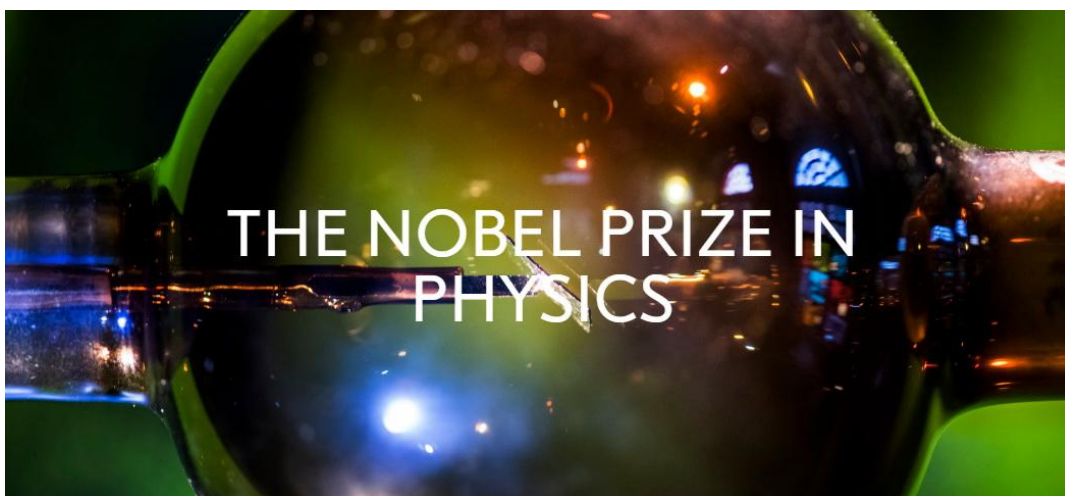
Appendix R: There is no “Nobel Prize in Economics”

(I offer no apology for the sarcasm used in this appendix. Sometimes sarcasm seems appropriate, and I think it is here. But you have been warned. 😊)

That’s right, let’s get this straight: There is no “Nobel Prize in Economics.” Writers in the media love to puff up the apparent authority of their economic proclamations by quoting someone who “won the Nobel Prize in Economics.”

But there is no prize by that name. Want proof?

From the [official web site of Nobel Prizes](#), this is the banner from the page for the Nobel Prize in **Physics** (screen captures taken on 12-Feb-2019):



And here’s the banner from the page for the Nobel Prize in **Literature**:



And for the Nobel **Peace** Prize:



Now have a look at the banner for the purported “Nobel Prize in Economics”:



(Source: <https://www.nobelprize.org/prizes/economic-sciences/>)

Huh? **The Sveriges Riksbank Prize?** Hmmm. Just doesn’t have the same ring to it as “Nobel Prize,” does it? The Sveriges Riksbank is Sweden’s central bank. So the money for this prize was not put up by Alfred Nobel, it was put up by a central bank, in fact, the world’s oldest central bank, founded in 1668. So what are the odds that anyone other than economists who perpetuate the central banking *status quo* will be awarded this prize? Zero. (Only two women were awarded that prize, and one of them, Elinor Ostrom, is excluded from the wrath of the previous sentence for her excellent *empirically-based* work described in the book *Governing the Commons*.) So the prize should really be called *The Swedish Central Bank Prize in Economics*.

And Economic *Sciences*? A lot of what goes down as “economics” is theoretical post-hoc justification for the strategies of those in power. It typically has a lot more to do with political opinion, with belief, than anything resembling actual science. Assumptions are made at the *start* of research that would require real-world verification if actual science were

being done. These assumptions should be the *end-product* of empirical and/or experimental studies. Instead, such ideas are assumed to be true and go unquestioned by most, at least if one wants paid work as an economist.

Science? Or Econo-Mists?

Most economists badly want us to think that their work is hard science. They load their papers with equations that look impressive, and typically a very hefty dose of jargon. But often those equations and jargon are *econo-mists*, that is, mists that obscure economic issues and make them difficult to understand.



Plus, those equations almost always exclude debt, banks, money, land, and nature. (See the chapter *How do economists get it so wrong?* in Book 2.) But those things are “so difficult to

model,” they say. Whenever debt is included in most mathematical models, the models show that the system blows up as you progress forward in time because the debt grows exponentially. What’s the solution? Remove any reference to debt from the model, of course! Sure, there’s \$300 Trillion of debt on the planet—up from \$86 Trillion of debt at the end of the year 2001—but go ahead, eliminate it from the model, what difference could it possibly make. And banks? Why include banks?! All *they* do is create our money supply. And nature? Nature is a permanent supplier of infinite resources and can handle any amount of waste we can dump on it, so why worry about nature. (There’s that sarcasm I mentioned.)

So the next time you hear a “Nobel-prize winning economist” pontificating on that level playing field that anyone can easily see is far from level, on free markets that anyone can see aren’t free, on money that is actually debt rather than wealth, making predictions that very often turn out to be wrong, defending a system that has national banking crises *eight times* more often than the economic system of the 1800’s, you can recall that the person is the winner of the **Sveriges Riksbank Prize** for supporting the parasitic enslavement-through-debt enterprise known as our money system.

Now you might think I would apologize here to that minority of economists who are honest practitioners of science with a true and abiding interest in knowledge that benefits humanity. But I don’t have to: the information above comes from them!

Or perhaps you think I’m being too harsh? Here’s a quote from a web site of the central bank of the US, the Federal Reserve, in their post entitled *The Beauty (Pageant) of Economics?*:

Few realize, especially outside of economists, that the prize in economics is not an “official” Nobel. The five original Nobels—physics, chemistry, peace, literature, and medicine or physiology—were established in Alfred Nobel’s will in 1895 to honor the most important discoveries in these respective areas. The first awards were made in 1901.

The award for economics came almost 70 years later—bootstrapped to the Nobel in 1968 as a bit of a **marketing ploy** to celebrate the Bank of Sweden’s 300th anniversary.

—The Beauty (Pageant?) of Economics, 1999.

Marketing ploy, indeed. The Swedish Central bank was involved, at the time, in a battle for dominance over the Swedish government. As usual, the central bank won the battle, as it has in most countries: “Central bank independence” is the euphemism for it.

The descendants of Alfred Nobel are against the prize for economics, as documented in *The Nobel family dissociates itself from the economics prize*. From their official comments:

The Economics Prize in memory of Alfred Nobel should be criticised on two grounds. First, it is a **deceptive** utilisation of the institution of the Nobel Prize and what it represents. Second, the economics prize is biased, in the sense that it one-sidedly rewards Western economic research and theory.

Alfred Nobel’s testament was not a hasty piece of work. It was a carefully thought out document. Also, Alfred Nobel’s letters suggest that he disliked economists...

But something must be wrong when all economics prizes except two were given to Western economists, whose research and conclusions are based on the course of

events there, and under their influence. I can imagine Alfred Nobel's sarcastic comments if he were able to hear about these prize winners. Above all else, he wanted his prizes to go to those who have been most beneficial to humankind, all of humankind!

What would be great is if every time each of us saw a media reference to a "Nobel-prize winning economist" or a "Nobel laureate in economics" that we sent the headline above and a link to this post to the author. We tell the author that, for accuracy, they should refer to their source as someone who won the Sveriges Riksbank Prize or the Swedish Central Bank Prize in Economics, and that the prize is disavowed by Nobel's descendants.

Perhaps, that way, we can make some progress in questioning authority where respect for that authority is more than misplaced. Perhaps we can also make progress in ending the regime of an economic system designed from the ground up to relentlessly funnel wealth from the billions of people who create real wealth by serving their fellows to the few who amass power over others by taking, taking, and then taking even more. Perhaps we can rename the prize to: *The Sveriges Riksbank Prize for Economic Theory Best Enabling the Dung Beetles of Davos to Amass Larger Balls of Dung.*

Appendix S: Corporate law

This Appendix is a continuation of the discussion of corporate law in *Chapter 31: Theft of free markets: When Big writes the laws*.

Pay no attention to the man behind the curtain

Corporate executives say that if society wants them to behave differently, then society needs to change the laws under which corporations operate, that the law currently directs them to maximize profits for shareholders, and that if they do not take that approach, the shareholders (owners) will promptly replace them with someone who does.

Yet if you suggest changes to the corporate legal structure, you are assailed by “free market” advocates who believe that the unfettered behavior of corporations is an expression of freedom and must not be curtailed.

However, don’t be fooled by the rhetoric. Know that companies go to great lengths to shape law and the regulatory processes in their favor *against* the interests and rights of others. They say that the law dictates that they behave this way. How convenient!

Even consummate free-marketeer F.A. Hayek clearly stated that some aspects of corporate law actually restrict free markets, and that government has a role in preventing monopolies and making sure that the exercise of an owner’s rights does not harm others:

...strong arguments can be advanced that serious shortcomings here, **particularly with regard to the law of corporations** and of patents, not only have made competition work much less effectively than it might have done but have even led to the destruction of competition in many spheres.

There are, finally, undoubted fields where no legal arrangements can create the main condition on which the usefulness of the system of competition and private property depends: namely, that the owner benefits from all the useful services rendered by his property **and suffers for all the damages to others caused by its use**.

—F.A. Hayek, *The Road to Serfdom*, 1944, Univ. of Chicago Press, P. 87. [Bolding by the author]

That was published in 1944 and Hayek listed on that same page the type of damages he was talking about: “certain harmful effects of deforestation, of some methods of farming, or of the smoke and noise of factories...” He wasn’t talking about fraud that *can* be dealt with by standard legal arrangements, he was speaking of things like the poisoning of a watershed that harms people, wildlife, and plants who have no formal legal contract with the offending corporation, no court at which they can point out breach of contract.

As Marjorie Kelly documents in her excellent book, *The Divine Right of Capital*, corporate law—in the making for well over a century—is designed to reestablish the ownership model from the days of monarchy and aristocracy.

First it was the king who owned everything and granted the use of resources. Later, certain nobles became powerful enough—that is, the monarch both feared them and needed them in

times of war—that they were granted a measure of ownership as well. This small group used all other people and all available resources for their benefit. In other words, all profits went to them. However, they also had some measure of responsibility that the workers and serfs from whom they benefited not starve, were protected from invading armies, had a church in which they could worship, and so forth. Many modern corporations seek to maximize benefits and minimize or eliminate responsibility for the people, communities, and land from which they profit.

“But, but, but...corporations are democratic”

Some free-marketeers object to this type of thinking saying: “How can you compare the corporate ownership model to monarchs and aristocratic owner class when corporations can have many thousands of shareholders and every shareholder has voting rights. Corporations are democratic.” Yes, but the following is so obvious: Let’s say a person owns 1,000 shares of Google or Apple—and that would be a major position for an individual, to put it mildly—and they can vote those shares, do they really have any material impact on the running of the company? Not even a shred. A *very* small group of people decides how the corporation operates: the very top executives and, sometimes, the very largest shareholders as well. For many decades, studies have lamented that even boards of directors have become rubber-stampers for executive decisions. In almost all corporations, the employees don’t get a vote on anything. And the communities in which the corporation operates, and from which they extract resources and services required for their business to function, certainly don’t get a vote. Corporations are very far from democratic.

Another argument in favor of keeping the current corporate structure is that corporations maximize profits for shareholders because without the capital supplied by the shareowners, the corporation would not even exist. Hmmm. So, let’s say I buy a share of Chevron stock. To whom does my money go? Not to the corporation for operational purposes. It goes to the previous owner of that share. *It turns out that most shareholders of modern corporations—around 99% according to central bank studies—never put a dime into the corporation:*

For example, in the US in 1999, a year when many “dot com” businesses were selling shares to the public, sales of new common stock totaled \$106 Billion, while trading for all shares totaled \$20.4 Trillion, so more than 190 times more money was spent by speculators buying shares from other speculators than was “invested” in new businesses.¹²⁹

The stock market as extractive mechanism

Especially with the strong growth of share buybacks by corporations, the stock market itself has become an extractive mechanism through which shareholders take far more money *out* of the market than they put into it for new business formation and expansion. According to the *Financial Times* FTalphaville web site:

Since 1960, cumulative net equity issuance has been **negative** \$6.3 trillion...
—FTalphaville.com, [Clearing up some misconceptions about how the stock market works](#), 28-Jul-2017.

¹²⁹ Marjorie Kelly, *The Divine Right of Capital: Dethroning the Corporate Aristocracy*, 9-Jan-2003, P. 189

In other words, in the US alone, \$6.3 Trillion more was taken *out* of the stock market by shareholders than was put into it for new business formation and expansion. And this trend is growing: In 2018, just in the US, corporations bought back more than \$1.1 Trillion of their own stock from shareholders. If you add in dividends paid to shareholders since 1960 (\$20 Trillion!), the amount extracted more than quadruples.¹³⁰ The raw data for these calculations comes from the US Federal Reserve.¹³¹

So we see another illusion we are all taught about the financial system: Far more than being the great incubator of new businesses and ideas, the stock market is an extractive mechanism, funneling money from the vast pool of corporate customers and employees—that is, all of us—to corporate owners. It *began* as a mechanism for funding new businesses and expanding others, and it still is; but those original purposes are now a *tiny* part of the action.

Most shareowners are speculators trading with other speculators. Still, dividend payments and share price appreciation are said to rightfully belong to the current group of speculators who happen to own shares even though the vast majority of them have nothing to do with the creation of corporate profits.

So if the sole legal purpose of the corporation is maximizing benefits for shareholders, what is the net result? When “expenses” that are employees get laid off, or are replaced by robots, or replaced by foreign workers with far lower salaries and no benefits, Wall Street rewards the corporation with a higher share price, which helps only the owners and those in the executive suite.

So what we see is that this corporate structure is actually cover for yet another major instance of the “something for nothing” mentality that plagues our world. The shareholders—almost all of whom do no work for the corporation—get the profits; *they reap where they have not sown*. The employees of most corporations, who do all the work to create those profits, get as small a salary as the corporation dares to pay them. *They do not get to keep what they create, what they earn*; the profits they create go to the owners.

The corporate apologists retort that millions of people are now shareholders, both directly and through pension and mutual funds, so the “owner class” is very large. But every study of who owns shares in this world shows the kind of results shown under *Stock ownership further propels the inequality*, that is, that the top 5% of the wealthiest own 71% of all stocks, and the top 20% own 93% of all stocks.

Not really surprising

And let’s not forget the far-reaching reality that our money is primarily issued by corporations, that our money is *corporate currency*, so we should not be surprised at the domination by large corporations when it is some of their own that create our money.

¹³⁰ US Federal Reserve Board of Governors, Equity Issuance and Retirement

¹³¹ Dividends paid, 1960 through 2018, was \$19.9 Trillion. Source: St. Louis Federal Reserve, Net corporate dividend payments

So, are corporations entirely evil?

So am I saying that corporations are all bad and that the corporate form should be eliminated? No, I am not. When what powers a corporation—that is, it's employees, communities, nature, and so forth—are doing a splendid dance of cooperation, they can deliver benefits for everyone. There is evidence that when a corporation brings intelligent, tested processes to a new region where nothing like it existed before, that general prosperity in that area tends to grow. Corporations can develop and deliver beneficial products and services. They can accumulate capital for beneficial research and development. And it makes sense that people should be able to pool resources to carry out a business plan.

However, the ownership model described above has most corporations squeezing employees, government, and nature primarily for the benefits of owners. As stated, many shareowners are reaping where they do not sow, getting something for nothing in a way that makes corporate law one more way to benefit a few at the expense of everyone else.

As shown in *Book 2*, the more a corporation focuses on a win-win-win-without-limit approach, on creating positive multiplication factors, and on partnership with all parties involved—owners, employees, customers, governments, communities, nature, and so forth—the better the results for all of us rather than a small group.

Appendix T: Stock buybacks

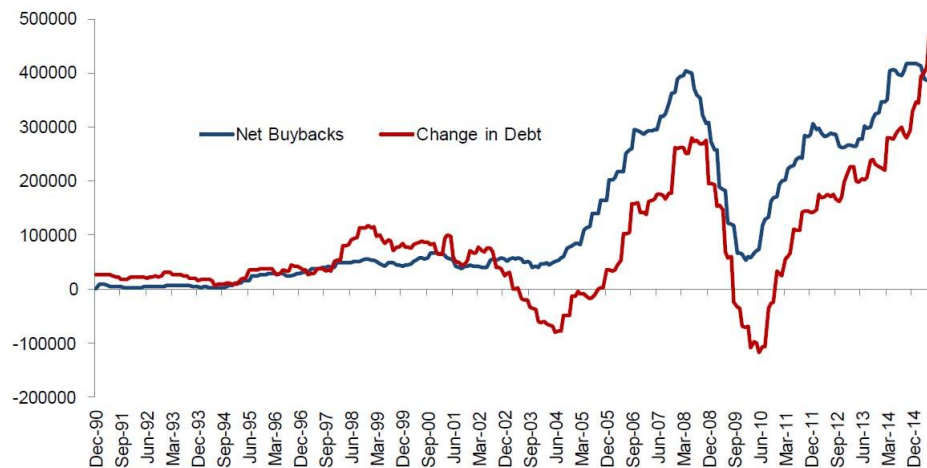
This is a continuation of the discussion in *Chapter 32: The invasion of the money snatchers*. It is not meant to be an exhaustive treatment of the topic. It simply shows how much debt is involved in stock buybacks and the strong influence it has on boosting stock prices.

* * *

The chart below compares the change in corporate debt with the amount spent on companies buying back their own shares to boost their stock price. The relationship is difficult to deny.

AND BUYBACKS ARE MAINLY FUNDED BY DEBT

Net buybacks and change in debt from US companies report and account



Source: SG Cross Asset Research/Equity Quant, MSCI

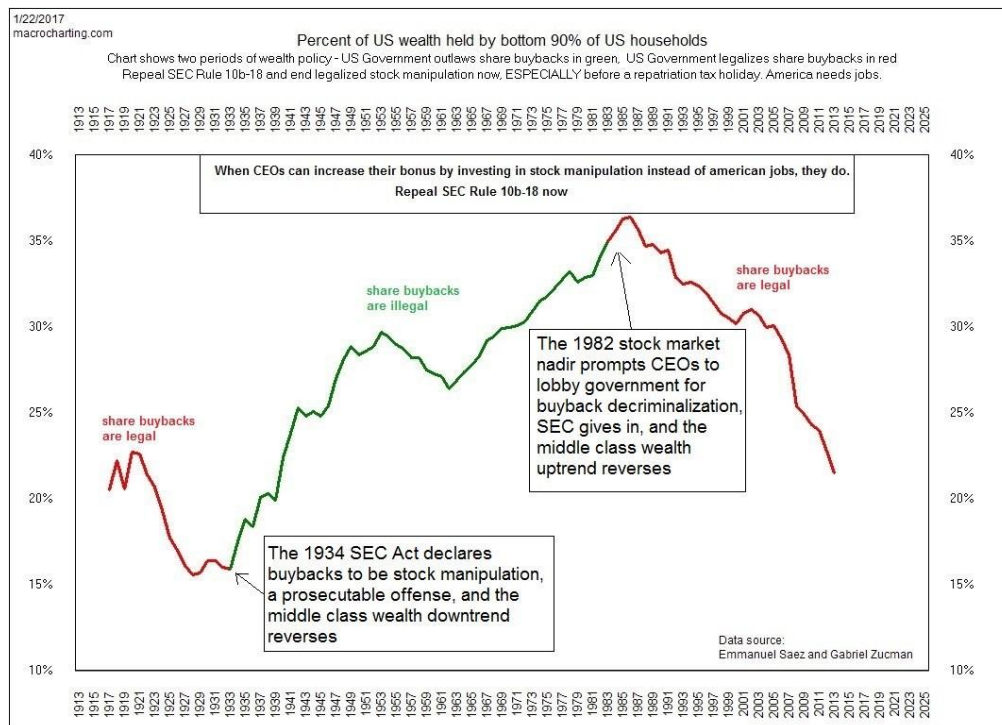
SOCIETE GENERALE
Cross Asset Research

And the level of buybacks more-than-strongly influences overall stock market levels (amounts spent on stock buybacks in each year are shown by the green bars; the level of the overall stock market is shown by the red line):



(Source: *Tradimo News*, [Understanding the story of stock buybacks](#), 25-July-2019)

The next chart shows that such financial engineering plays a direct role in wealth inequality:



(Source: *UPFINA*, [Stock Buybacks Harm US Competitiveness](#), 3-Aug-2017)

Companies buying back their own stock was ruled illegal stock manipulation in 1934, ending a downtrend in the share of US financial wealth for the “bottom 90%,” shown by the red line at the left of the chart. Once buybacks were made illegal, the 90% with the least

wealth consistently gained in their share of US wealth (the green line on the chart), almost certainly because, in order to make money, companies had to invest in productive capacity—which leads to more and higher-paying jobs. In 1982, the US Reagan administration made buybacks legal again, and the wealth trend for the 90% with the least wealth (shown where the line turns from green to red) has been falling hard ever since. That means, of course, that the percent-of-wealth line for the top 10% has been strongly rising, as shown in multiple places in this book.

Once the dots are connected, once again we see that everything is connected!

Appendix U: Who benefits from our repeating boom/bust cycles?

This is a continuation of the discussion in *Chapter 33: Harvesting the crises: Booms, bubbles, and busts*.

Enter the central banks

The creation of most central banks was justified by the alleged need for a backstop for commercial banks during panics and bank runs. Central banks were designed to be the “lender of last resort” for banks when panic hit the streets and everyone else was afraid to lend to those banks. But with each financial crisis over the last 100 years, the central banks have been granted more and more power in a deluded quest by governments to prevent future financial crises without ever addressing the real causes.

But granting the central banks increasing power hasn’t eliminated the boom-bust cycle. Now, central banks are the key drivers, one could say the guarantors, of the boom-bust cycle. The boom-bust cycle has been institutionalized!

During each cycle, after a number of years, all that loan-propelled growth starts boosting the wages of most workers. This triggers central banks to raise the cost of borrowing—that is, they increase interest rates—to head off the “dreaded” *wage-price spiral*. As interest rates rise, borrowing slows, slowing the economy. Businesses start shedding employees, some can’t repay their loans, bankers lose confidence, and you end up with a recession. Once the realization dawns that a recession is in full swing, the central banks start lowering interest rates to stimulate borrowing, starting the cycle over again.

So the central banks, instead of placing the blame with precision—namely on the over-creation of loans (money) by over-confident bankers, and on their own raising and lowering of interest rates—blame rising wages for why they need to slow the economy!

These booms and busts are problematic for many. People take out loans for houses and cars thinking they’ll be making more and more money over time. But the recession hits, they lose their job, can’t repay their loans, and they are faced with the repo man taking their car, or the sheriff or bailiff taking the keys to their house.

For businesses, long-term planning becomes a guessing game so they increasingly shorten their timeframes. Ultimately, most focus on sales and profits in the next few quarters. They borrow money not to build factories as part of a long-term plan, but to buy back shares of their own stock so they appear more profitable (higher earnings per share delivered by a reduced share count) and Wall St loves them for bidding their stock price higher.

For governments, during the good times, when money is rolling in, groups pressure governments to inaugurate new spending programs. Governments, instead of saving up for the inevitable future downturn, succumb to that pressure and make promises based on this artificially elevated stream of income. When the economy turns down, the funds for those promises are gone, plus the government’s expenses rise sharply due to increased spending

for safety-net programs, and their tax collections decline sharply. Governments find themselves borrowing formerly unimaginable sums of money, walking us all further out on the debt plank.

With our current system, this turbulence is inevitable. Money as debt issued by bankers exaggerates cyclic forces in the economy, with strongly negative consequences for people, businesses, and governments.

Again, no one voted to put *private* bankers in charge of the *public's* economy. Yet such is the case, a *structure* that has been imposed on people without their consent. Behold the Debt Standard!

The boom-bust cycle concentrates capital

During an economic downturn, the prices of assets—stocks, businesses, real estate, and commodities—tend to drop, sometimes in a big way. Sophisticated traders make money on these price declines by placing financial bets on price declines. Once decline is obvious, central banks lower interest rates to stimulate borrowing, making cheap money available for investors to borrow money to buy assets at low prices. This boom-bust process is hugely profitable for those with large financial resources. They make money on the boom, then on the bust, buying assets whose prices were smashed down by panic selling. This further concentrates financial wealth in their hands.

Some say this creation of booms through easy money, and then busts by making money scarce, is accidental. Others say it is intentional, but they are accused by the first group as “conspiracy theorists,” a phrase invented by the CIA to discredit ideas that challenge the *status quo*.

But is it a “conspiracy theory” if it is put forward in a paper published in 2012 by an organization built from the ground up to defend the *status quo*, the International Monetary Fund (IMF)? Here’s a quote from that paper:

The second form of usury is the ability of private creators of money to manipulate the money supply to their benefit, by creating an abundance of credit and thus money at times of economic expansion and thus high goods prices, followed by a contraction of credit and thus money at times of economic contraction and thus low goods prices. [There are] numerous ... historical examples where this mechanism was at work. It repeatedly led to systemic borrower defaults, forfeiture of collateral, and therefore the **concentration of wealth in the hands of lenders**.

—Benes and Kumhoff, The Chicago Plan Revisited, Copyright 2012, International Monetary Fund

Let’s be less timid than these IMF academics: The lenders lend lots of money during good times, fanning the flames of price increases in assets such as stocks and real estate. Being the ultimate money-creation insiders, the Big Lenders have a very good idea of when the central banks and commercial lenders will shut off this loan spigot. (The biggest lenders have regular meetings with central banks and are allowed to profit from this information flow.) As that point approaches, they sell assets to the members of the public who fear missing out on the latest “sure money” mania and play the role of “the last turkey in the trap.” The Big Lenders then place financial bets that the prices of these assets will decline. Then the loan spigot is shut down and, in due course, asset prices decline, sometimes significantly. The big

lenders make a profit on their bets that prices would decline, and they use those profits to buy, and to help their favored clients buy, assets whose prices have collapsed from panic selling. Then they re-open the loan spigot so that others can help them drive up the prices of these assets again. Rinse and repeat. In our modern world, that what is really meant by “**the concentration of wealth in the hands of lenders**” from the IMF quote above.

Appendix V: *The Great Taking*

Changes to laws

First, it is important to either read the Chapters section of David Webb's book *The Great Taking*, and/or to realize that he documents the claims he makes about changes to laws in jurisdictions from local to national to international. Webb uncovered these changes in law and is *reporting* them, not making up some theory. As stated earlier, I am not qualified to judge whether the legal changes will be as effective as Webb expects.

Dematerialize

Readers of this book know that money got dematerialized globally as we transitioned from the Gold Coin Standard to the Debt Standard from 1913 to 1971.

David Webb reports that in 1976, that is, soon after money itself got dematerialized, a multi-decade process was started, headed, not by Wall Street types, but by a career CIA operative, Bill Dentzer, Jr., who had little if any investment market experience! The process was to dematerialize all "securities," that is, stocks, bonds, futures, forwards, options, and other derivatives. Prior to this, if you bought shares of a company, you received, and thus owned, a stock certificate that looked like this:



(Source: *Walmart.com*, though this memorabilia was sold so the link to it no longer works.)

A bond certificate sample—including the paper coupons one had to deliver to receive interest payments on the bond—is shown in *Appendix J: The Bond Market*.

If you buy shares or bonds now, you don't receive a certificate, and legally, they are no longer your personal property. They are held by what's called a clearing corporation. In the US, that company is DTCC (Depository Trust & Clearing Corp.), in Europe it's *EuroClear*.

What's on your brokerage statement is what's called a "book entry" that records that you are the latest purchaser of that stock, bond, or other security.

The excuse for implementing this system was that Wall Street was overwhelmed by the volume of trades taking place, had no time to process all of these paper certificates in a timely way, and there needed to be a central computerized facility that could quickly process massive volumes of high-speed trading. From *The Great Taking* about the dematerialization project:

That there was some great strategic purpose behind dematerialization is evidenced by the fact that the CIA was assigned the mission. The project leader was William (Bill) Dentzer, Jr., a career CIA operative. By his admission in his own written memoir, he started his career working to establish anti-communist student organizations in Europe with the backing of the CIA. The CIA had arranged his draft deferment [author: after which he held several CIA positions around the world]... Then, strangely, even though he had no background in any aspect of banking or finance, he was appointed New York State Superintendent of Banks by Nelson Rockefeller. This came after his nomination to the newly-formed New York State Council of Economic Advisors by its Chairman, former head of the World Bank, Eugene Black. Interestingly, Black's father had been Chairman of the Federal Reserve in 1933. Within two years of assuming his position as New York State Bank Superintendent, Dentzer was named Chairman and CEO of the newly formed Depository Trust Corp. (DTC), a post he held for the next twenty-two years, i.e., through the entire process of dematerialization.
—The Great Taking, 2023, P. 6

Security entitlement

Legally, now, that book entry means that you have what's called a "security entitlement" to the number of shares shown on your brokerage statement. This undoes four centuries of law that said the purchaser of a security owned it, that it was their *personal property*. No longer. This security entitlement is a weak legal position that places you last in line to get the benefits of ownership if there is any question about who actually owns the security when the next major financial crisis hits. That benefit is *pro rata*, that is, you will get your share of whatever is left if there are any shares or bonds left of the type you own after those ahead of you in line get their claims filled.

Who is ahead of you in line? They are legally called "the protected class." These are the creditors of the clearing companies, the creditors of your brokerage firm or bank, the brokerage firm or bank itself, and so forth. All have a lot more influence and legal clout, and now legal authorization, to be ahead of you in line. This even applies to your shares in your pension fund or mutual fund. Such organizations are not at the top of this line. This "line" has been created under the heading "keeping the system safe." In other words, the richest and most influential creditors and firms are considered necessary for the functioning of the financial system and cannot be allowed to fail. You are not considered necessary for the

functioning of the system so, even though you might think you own some security, you come last.

It's all become collateral

Most of us know about collateral. For example, your house is collateral for any mortgage or loan on your house, your car for your auto loan, and so forth. Why would there be competing claims for the shares or bonds you thought you owned? Because of what's called the derivatives complex. You may have heard of people trading options, futures, swaps, repurchase agreements, and so forth. These types of instruments exist for betting on the price direction of stocks, bonds, currencies, and so forth, and for funding other trades. Many of them require that collateral be put up for the agreement. It is legal for your brokerage firm to pledge your shares or bonds as collateral, even for their own trading for profits. (Legally this is called, I kid you not, "self help.") So most securities are pledged as collateral at least once (this is called *hypothecation*) and sometimes those to whom they are pledged will pledge them on to yet another party (called *re-hypothecation*). This results in potentially several claimants for a single instance of collateral.

The derivatives/funding complex has existing trades that are at least ten times larger than the entire world economy, so it's an exceptionally good bet that any shares or bonds you bought are pledged as collateral in the derivatives complex. In this new legal setup, some are called, I kid you not, *collateral givers* (that would be folks like you and me) and *collateral takers* (that would be those ahead of you in line.)

An example might help: Buyers of futures, options, ETFs, unallocated accounts, and other derivatives related to the gold market believe they have purchased the right to claim real physical gold if they wish to exercise that claim. However, these claims add up to hundreds of times the amount of actual gold available to fill all those claims. So this "market" only works as long as most holders of these "paper gold" instruments don't exercise their claim for physical gold. If there were a major financial market crisis, many would file their claims. Only those first in the line described above would be likely to get any real gold at all. The *pro rata* share of the assets remaining when those who are last in line (us!) would be your *pro rata* share of nothing because the physical gold would already be gone, claimed by the richest and most powerful because they are "the protected class" whose solvency is deemed by the protected class to be essential to the system. In legal terms, they have been granted a "safe harbor." You and I have not.

It is now assured that in the implosion of "The Everything Bubble", collateral will be swept up on a vast scale. The plumbing to do this is in place. Legal certainty has been established that the collateral can be taken immediately and without judicial review, by entities described in court documents as "the protected class." Even sophisticated professional investors, who were assured that their securities are "segregated", will not be protected.

—The Great Taking, 2023, P. 9

Harmonization

The fifty-year effort mentioned above was to accomplish what these people call *harmonization* of laws across the world (right down to the laws of your province or state) so that, when the next global financial crisis that threatens the functioning of the system occurs, the laws enable those at the head of the line to take any collateral they deem owed to them without any need to go before a judge in a bankruptcy court or any such legal proceeding. The laws now enable the smooth and rapid *cross-border mobility of collateral* that would

allow a creditor of DTCC in Luxembourg to take shares or bonds from you as a California resident. For the “safety of the system,” of course, that is, this is all for your own good. (Yes, that’s sarcasm.)

It gets even worse

These laws also apply to anything that is collateral for a bank debt, such as a house or factory. So yes, if you owe any debt on your house, and the financial crisis means that you miss a couple of mortgage payments, some distant “collateral taker” can become the new owner of your house. Perhaps they will be kind enough to rent it to you. (Yes, more sarcasm.) Remember the claim of the WEF: “You will own nothing and you will be happy about it.” At least that’s the way they see it.

In the case where your bank fails, your deposits could be taken to satisfy the claims of the creditors of the bank.

Is there anywhere safe from this?

Not in what the world calls “the West.” Sweden held out for awhile but then relented due to pressure from the EU. It’s unlikely that Communist China and Russia have signed up for this “harmonization,” but if you moved there, they certainly would not have any way to protect any Western assets on your behalf. Russia has had its Western assets taken already, and if the Chinese Communist Party decides that they own what you think you own, guess who owns it.

Anywhere might be safe from this if you are free of debt and own an immovable asset such as your house. Other assets that are unlikely to be at risk are fully-owned personal tools and supplies for growing food and doing construction, energy-production devices such as solar panels, wind and water mills, physical gold and silver, and so forth.

Like other tyrants have, they may make the ownership or use of gold and silver illegal, but as shown in the magnificent book *A Paradise Built in Hell* by Rebecca Solnit, when the chips are really down (Solnit documents five examples of this, such as the 1906 San Francisco Earthquake), local people work together to get everyone in the community through the disaster as well as they can. Her case studies show that government think-tank reports and claims that, in major disasters, people will turn on one another in vicious ways, are entirely wrong. I highly recommend Solnit’s book. What her book means is that there might be many local communities that would work together to create their own local barter and money system. Gold and/or silver could be an excellent starting point for such a system. Perhaps needless to say, setting up a local money system *before* such a disaster strikes could have immense local value.

The Everything Bubble, and then The Great Deflation

The *Everything Bubble* (mentioned in *Appendix L: Quantitative Easing*) has been created by money-printing causing over-valuation of assets worldwide. David Webb theorizes that, with the new legal setup described above, when the next global financial crisis takes place, the Everything Bubble will burst, bringing rapidly falling asset prices (*The Great Deflation*, he calls it) because so many are unable to keep up with loan payments that keep the prices of those assets floating at a high level. Those first in the collateral line will activate their cross-border collateral mobility rights and a small group truly will end up owning most of the valuable assets on the planet.

But what about “...and you’ll be happy about it”?

When the WEF predicted that, by 2030, you will own nothing and *you will be happy about it*, what could they possibly mean in this context? According to David Webb, they mean that you will be lent a sufficient quantity of CBDCs (Central Bank Digital Currencies) so that you can rent what you need to live. Of course, at that point, you will be a debt serf.

What if you go to the WEF web site and some of their pretty-sounding words make you think that they actually have some great ideas and that those folks ruling the planet would be better than what we have now? I doubt that would happen to most people because most aren’t sufficiently gullible to believe what they read there, but there are people who believe that the Earth is flat, so I guess Cole Porter was right: “Anything goes.” However, even if that does happen to someone, I have a warning for them: The concentrated pool of money and power being proposed would be so attractive to those who want to rule over others absolutely that they would do anything, and I mean anything, to be the one person or small group that controls all that money and power. At that point, human freedom would be lost, probably for generations.

The only defense against this plan is pushback from people, judges, elected officials, and so forth.

Appendix W: Demonetized Currencies

Here is a list of over six hundred currencies that are no longer money, most often because of hyperinflation (the over-production of that currency) and/or war that resulted in the dissolution of the government that issued the currency. (I reproduce the list here because it no longer appears on the web, one has to go to the [Internet Archive](#) (also known as the *Wayback Machine*) to find it, and most people are unaware of this massive repository of web pages that are no longer maintained and thus no longer appear in results from search engines.

Demonetized Currencies

CURRENCY NAME (CURRENCY CODE)	INCEP-TION	DEMONE-TIZED	DURA-TION (Years)	DESTROYED BY
Yugoslav 1994 Dinar (YUG)	1994	1994	1 mo.	Hyperinflation
DDR Kuponmark (DDK)	1948	1948	1 mo.	WWII
Hungarian Bilpengoe (HUB)	1946	1946	1.5 mos.	Hyperinflation
Hungarian Adopengoe (HUA)	1946	1946	2 mos.	Hyperinflation
German Gold Mark (DEG)	1923	1923	2 mos.	Hyperinflation
Slovenia Laibach Lira (SIL)	1944	1944	2.5 mos.	WWII
Krajina (Serbian Republic) October Dinar (HRKO)	1993	1994	3 mos.	Hyperinflation
Yugoslav October Dinar (YUO)	1993	1993	3 mos.	Hyperinflation
Kazakhstan Ruble (KZR)	1993	1993	3 mos.	Hyperinflation
North Korean Won (KPO)	1959	1959	3 mos.	Hyperinflation
Hungarian Milpengoe (HUM)	1946	1946	3 mos.	Hyperinflation
Serbian Republic October Dinar (BASO)	1993	1994	4 mos.	Other War
Polish Zloty Lublin (PLL)	1944	1945	4 mos.	WWII
Hungarian Red Army Pengoe (HUR)	1945	1945	6 mos.	WWII
Uzbekistan Coupon Sum (UZC)	1993	1994	8.5 mos.	Hyperinflation
Kepulauan Riau Rupiah (IDRR)	1963	1964	8.5 mos.	Replaced with IDR
Japan Base Metal Kammon (JPK)	1904	1905	9 mos.	Hyperinflation
Japan Gold Oban (JPO)	1904	1905	9 mos.	Hyperinflation
Japan Silver Momme (JPM)	1904	1905	9 mos.	Hyperinflation
Transnistrian Ruble (PDR)	1994	1994	11 mos.	Hyperinflation
Ukraine Karbovanetz (UAK)	1992	1993	11 mos.	Hyperinflation
Brazil Cruzeiro Real (BRR)	1993	1994	1	Hyperinflation
Albanian Lek Valute (ALV)	1992	1993	1	Discontinued
Krajina (Serbian Republic) Reformed Dinar (HRKR)	1992	1993	1	Hyperinflation
Latvia Ruble (LVR)	1992	1993	1	Hyperinflation
Lithuania Talonas (LTT)	1992	1993	1	Hyperinflation

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Macedonian Denar (MKN)	1992	1993	1	Hyperinflation
Moldovan Leu Cupon (MDC)	1992	1993	1	Hyperinflation
Serbian Republic Reformed Dinar (BASR)	1992	1993	1	Hyperinflation
Yugoslav Reformed Dinar (YUR)	1992	1993	1	Hyperinflation
Moldovan Ruble Kupon (MDR)	1991	1992	1	Hyperinflation
Slovenia Tolar Bons (SIB)	1991	1992	1	Renamed SIT
Brazil Cruzado Novo (BRN)	1989	1990	1	Hyperinflation
Chinese Gold Chin Yuan (CNG)	1948	1949	1	Chinese Civil War
Chinese Silver Yin Yuan (CNS)	1948	1949	1	Chinese Civil War
Sinkiang Gold Yuan (CNSG)	1948	1949	1	Chinese Civil War
Azerbaijan Toman (IRZT)	1945	1946	1	Conquered by Iran
Austrian Allied Military Schillings (ATM)	1944	1945	1	WWII
Czechoslovak Red Army Korunu (CSR)	1944	1945	1	WWII
Romanian Red Army Leu (ROR)	1944	1945	1	WWII
Soviet Ruble of 1923 (SUB)	1923	1924	1	Hyperinflation
Russian Ruble of 1922 (RUFR)	1922	1922	1	Creation of the USSR
East Africa Florin (XEAF)	1920	1922	1	WWII
Monaco Franc Germinal (MCG)	1920	1921	1	Emergency measure
North Russian Ruble (RUNR)	1919	1920	1	Creation of the USSR
Austrian Krone (ATK)	1918	1919	1	WWI
Transcaucasian Ruble (ZKRR)	1917	1918	1	Russian Civil War
German New Guinea Mark (PGM)	1914	1915	1	WWI
German Southwest Africa Mark (NAP)	1914	1915	1	WWI
Confederate States Reformed Dollar (CSAR)	1864	1865	1	US Civil War
French Franc (Mandats Territorial) (FRM)	1796	1797	1	Hyperinflation
French Franc (Assignats) (FRA)	1795	1796	1	Hyperinflation
Paper Poland Florin Zloty (PLF)	1794	1795	1	Partitioned by Austria
Krajina (Serbian Republic) 1994 Dinar (HRKG)	1994	1996	2	Hyperinflation
Georgia Kupon Larit (GEK)	1993	1995	2	Hyperinflation
Belarus Ruble (BYL)	1992	1994	2	Hyperinflation (Indirect)
Bosnia Dinar (BAD)	1992	1994	2	Hyperinflation
Yugoslav Convertible Dinar (YUN)	1990	1992	2	Hyperinflation
Argentina Peso Argentino (ARP)	1983	1985	2	Hyperinflation
Oman Rial Saidi (OMS)	1970	1972	2	Act of Independence
Ghana Old Cedi (GHO)	1965	1967	2	Replaced with GHC
French Franc Nouveau (FRF)	1960	1962	2	Renamed French Franc
Korean Military Won (KROM)	1945	1947	2	Replaced with KPP
Italy "Badaglio" Lira (ITLB)	1943	1945	2	WWII

Italy "Mussolini" Lira (ITLM)	1943	1945	2	WWII
Italy American Military Lira (ITA)	1943	1945	2	WWII
Italy British Military Lira (ITB)	1943	1945	2	WWII
Reichs Karbowanez (UAC)	1942	1944	2	WWII
US "Hawaiian" Dollar (USDH)	1942	1944	2	WWII
Spanish Nationalist Peseta (ESPN)	1936	1939	2	WWII
Soviet Transcaucasian Ruble (ZKSR)	1922	1924	2	Creation of the USSR
Far Eastern Republic Ruble (DBRR)	1920	1922	2	Creation of the USSR
Soviet Armenian Ruble (AMSR)	1920	1922	2	Creation of the USSR
Soviet Azerbaijan Ruble (AZSR)	1920	1922	2	Creation of the USSR
Armenian Ruble (AMR)	1918	1920	2	Creation of the USSR
Azerbaijan Republic Ruble (AZR)	1918	1920	2	Creation of the USSR
Khiva Tenga (KHVT)	1918	1920	2	Creation of the USSR
Germany Darlenskasse Ost Ruble (DEOR)	1916	1918	2	WWI
Peru Inca (PER)	1880	1882	2	Discontinued
Haiti New Paper Gourde (HTN)	1870	1872	2	Hyperinflation
Maryland Red Shillings (CMDR)	1781	1783	2	Hyperinflation
New Jersey New Shilling (CNJN)	1781	1783	2	Hyperinflation
Vermont State Shilling (CVTS)	1781	1783	2	Hyperinflation
Bosnia New Dinar (BAN)	1994	1997	3	Replaced with BAM
Russian Ruble (RUR)	1991	1994	3	Hyperinflation
Brazil Cruzeiro (BRE)	1990	1993	3	Hyperinflation
Nicaragua Cordoba (NIC)	1988	1991	3	Hyperinflation
Brazil Cruzado (BRC)	1986	1989	3	Hyperinflation
Laos Liberation Kip (LAL)	1976	1979	3	Hyperinflation
Viet Nam South Dong (VNS)	1975	1978	3	Union of Vietnam
Biafran Pound (BIAP)	1967	1970	3	Conquered by Nigeria
Katanga Franc (KATF)	1960	1963	3	Act of Independence
Portuguese India Escudo (INPE)	1959	1962	3	Act of Independence
Reunion Franc (REF)	1959	1962	3	Hyperinflation
German Sperrmark (DES)	1951	1954	3	Discontinued
German Allied Mark (DEA)	1945	1948	3	WWII
Japanese Allied Yen (JPA)	1945	1948	3	WWII
Nationalist Manchurian Yuan (CNNY)	1945	1948	3	Chinese Civil War
Netherlands Indies Gumpyo Roepiah (NIDR)	1943	1946	3	WWII
Malaya Gumpyo Dollar (MYAG)	1942	1945	3	WWII
Philippine Guerilla Peso (PHG)	1942	1945	3	WWII
Netherlands Indies Gumpyo Gulden (IDDJ)	1941	1944	3	WWII

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Romania Infinex Leu (ROI)	1941	1944	3	WWII
Canton Dollar (CNDC)	1935	1938	3	WWII
Danzig Mark (DZGM)	1920	1923	3	WWI
Memel Mark (MMLM)	1920	1923	3	WWI
Soviet Khiva Ruble (SUVT)	1920	1923	3	Creation of the USSR
Georgian Ruble (GER)	1918	1921	3	Creation of the USSR
Bukhara Tenga (BKHT)	1917	1920	3	Creation of the USSR
Mexico "Inconvertible" Paper Peso (MXI)	1913	1916	3	Hyperinflation
Confederate States Dollar (CSAD)	1861	1864	3	US Civil War
Maryland Black Shillings (CMDDB)	1780	1783	3	Hyperinflation
Afghanistan Dostumi Afghani (AFAD)	1998	2002	4	Hyperinflation
Afghanistan Rabbini Afghani (AFAR)	1998	2002	4	Hyperinflation
Angola Kwanza Reajustado (AOR)	1995	1999	4	Hyperinflation
Tatarstan Shamil (RUTS*)	1992	1996	4	Part of Russia
Croatian Dinar (HRD)	1991	1995	4	Other War
Congolese Zaire (CDZ)	1967	1971	4	Act of Independence
Zambian Pound (ZMP)	1964	1968	4	Act of Independence
Algerian New Franc (DZF)	1960	1964	4	Act of Independence
Ruanda-Urundi Franc (BRIF)	1960	1964	4	Act of Independence
German Bekomark	1954	1958	4	Discontinued
German Libkamark	1954	1958	4	Discontinued
Djibouti CFA Franc (DJC)	1945	1949	4	Act of Independence
Indonesia Guerilla Rupiah (IDG)	1945	1949	4	Replaced with IDN at par
Taiwan Nationalist Yuan (TWN)	1945	1949	4	Chinese Civil War
French Franc (Allied Military Provisional) (FRP)	1944	1948	4	WWII
Burmese Gumpyo Rupee (BUG)	1941	1945	4	WWII
Croatian Kuna (HRC)	1941	1945	4	WWII
French Indochina Military Yen (ICFG)	1941	1945	4	WWII
Hong Kong Military Yen (HKG)	1941	1945	4	WWII
Japanese Military Yen (XJPM)	1941	1945	4	WWII
Nanking/CRB Yuan (CNPN)	1941	1945	4	WWII
New Hebrides Franc (NHF)	1941	1945	4	WWII
Oceania Gumpyo Pound (XOGP)	1941	1945	4	WWII
Philippine Gumpyo Peso (PHJ)	1941	1945	4	WWII
Serbian Dinar (SRDD)	1941	1945	4	WWII
Germany Behelfszahlungsmittel (XDEB)	1940	1944	4	WWII
Soviet Bukhara Ruble (BKSR)	1920	1924	4	Creation of the USSR
Latvia Ruble (LVB)	1918	1922	4	Hyperinflation

Ruble Sovnazki (RUFS)	1918	1922	4	Creation of the USSR
Russian Ruble Sovnazki (RUFS)	1918	1922	4	Hyperinflation
Yugoslav Kronen (YUK)	1918	1922	4	WWI
Spanish Escudo (ESE)	1864	1868	4	Latin Monetary Union
Alabama Confederate Dollar (CSALD)	1861	1865	4	US Civil War
Arkansas Confederate Dollar (CSAKD)	1861	1865	4	US Civil War
Florida Confederate Dollar (CSFLD)	1861	1865	4	US Civil War
Georgia Confederate Dollar (CSGAD)	1861	1865	4	US Civil War
Louisiana Confederate Dollar (CSLAD)	1861	1865	4	US Civil War
Mississippi Confederate Dollar (CMSMD)	1861	1865	4	US Civil War
North Carolina Confederate Dollar (CSNCD)	1861	1865	4	US Civil War
South Carolina Confederate Dollar (CSSCD)	1861	1865	4	US Civil War
Tennessee Confederate Dollar (CSTND)	1861	1865	4	US Civil War
Texas Confederate Dollar (CSTXD)	1861	1865	4	US Civil War
Tajikistan Ruble (TJR)	1995	2000	5	Hyperinflation
Zairean New Zaire (ZRN)	1993	1998	5	Hyperinflation
Angola Kwanza Novo (AON)	1990	1995	5	Hyperinflation
Israel Shekel (ILL)	1980	1985	5	Hyperinflation
Chinese Old Jen Min Piao Yuan (CNP)	1948	1953	5	Hyperinflation
Romanian New Leu (RON)	1947	1952	5	Hyperinflation
Indonesia "Java" Rupiah (IDJ)	1945	1950	5	Act of Independence
Indonesia "Nica" Guilder (IDD)	1945	1950	5	Act of Independence
Netherlands Indies Gumpyo Roepiah (IDDR)	1941	1946	5	Hyperinflation
Polish Cracow Zloty (PLK)	1940	1945	5	WWII
Slovak Koruna (SKO)	1940	1945	5	WWII
Italian East Africa Lira (AOIL)	1936	1941	5	WWII
Rif Republic Riffan (MARR)	1921	1926	5	Other War
Ukraine Grivna (UAG)	1917	1922	5	Creation of the USSR
Southwest Africa Mark (NAM)	1915	1920	5	WWI
Serbian Dinar (SRBD)	1913	1918	5	WWI
South African Republic Pound (ZAPP)	1905	1910	5	Switched to GBP
Greek Phoenix (GRP)	1828	1833	5	Replaced with GRS at par
Transnistrian Kupon Ruble (PDK)	1994	2000	6	Hyperinflation
Peru Inti (PEI)	1985	1991	6	Hyperinflation
Rhodesian Pound (RHP)	1964	1970	6	Act of Independence
North Viet Nam Piastre Dong Viet (VDD)	1953	1959	6	Hyperinflation
Germany Reichskreditkassenscheine (XDEK)	1940	1946	6	WWII
Bohemia and Moravia Koruna (CSM)	1939	1945	6	WWII

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Japan Military Yen (CNPY)	1939	1945	6	WWII
Estonia Marka (EEM)	1918	1924	6	Hyperinflation
Fiume Krone (FIUK)	1918	1924	6	WWII
West Indies Joe (GYJ)	1830	1836	6	Act of Independence
French Livre (Assignats) (FRL)	1789	1795	6	Hyperinflation
Belarus New Ruble (BYB)	1994	2001	7	Hyperinflation
Russian Federation Ruble (RUR)	1991	1998	7	Hyperinflation
Argentina Austral (ARA)	1985	1992	7	Hyperinflation
Equatorial Guinea Franco (GQF)	1985	1992	7	West African Monetary Union
Viet Nam New Dong (VNN)	1978	1985	7	Replaced 10:1 VNN
Peseta Guineana (GQP)	1968	1975	7	Act of Independence
Qatar-Dubai Riyal (XQDR)	1966	1973	7	Act of Independence
Gambia Pound (GMP)	1964	1971	7	Act of Independence
Malawi Pound (MWP)	1964	1971	7	Act of Independence
Congolese Republic Franc (CDG)	1960	1967	7	Hyperinflation
Viet Minh Piastre Dong Viet (VDP)	1946	1953	7	First Vietnam War
Hungarian Korona (HUK)	1918	1925	7	Hyperinflation
Connecticut Continental Shilling (CCTS)	1776	1783	7	Hyperinflation
Delaware Continental Shilling (CDES)	1776	1783	7	Hyperinflation
Georgia Continental Shilling (CGAS)	1776	1783	7	Hyperinflation
Maryland Continental Shilling (CMDS)	1776	1783	7	Hyperinflation
Massachusetts Continental Shilling (CMAS)	1776	1783	7	Hyperinflation
New Hampshire Continental Shilling (CNHS)	1776	1783	7	Hyperinflation
New Jersey Continental Shilling (CNJS)	1776	1783	7	Hyperinflation
New York Continental Shilling (CNYS)	1776	1783	7	Hyperinflation
North Carolina Continental Shilling (CNCS)	1776	1783	7	Hyperinflation
Pennsylvania Continental Shilling (CPAS)	1776	1783	7	Hyperinflation
Rhode Island Continental Shilling (CRHS)	1776	1783	7	Hyperinflation
South Carolina Continental Shilling (CSCS)	1776	1783	7	Hyperinflation
Virginia Continental Shilling (CVAS)	1776	1783	7	Hyperinflation
Irian Barat Rupiah (IDIR)	1963	1971	8	Replaced 1:12.63 IDR
Czechoslovak New Koruna (CSC)	1945	1953	8	Replaced 5:1 CSK
German Effektersperrmark (DERE)	1931	1939	8	WWII
German Kreditsperrmark (DERK)	1931	1939	8	WWII
Polish Marka (PLM)	1916	1924	8	WWII
Germany Darlenskasse Ost Mark (DEOM)	1914	1922	8	WWI
Kiau Chau Dollar (JPY)	1914	1922	8	WWI
Ottoman Empire Paper Lira (XOTL)	1914	1922	8	WWI

Montenegro Perper (MEP)	1910	1918	8	WWI
Chinese Paper Tael (CNTP)	1853	1861	8	Hyperinflation
New Hampshire Lawful Shilling (CNHL)	1755	1763	8	Act of Independence
Massachusetts Shilling Middle Tenor (CMAM)	1741	1749	8	Act of Independence
Massachusetts Shilling New Tenor (CMAN)	1741	1749	8	Act of Independence
Liberian Liberty Dollars (LRDL)	1991	2000	9	Other War
Rhodesia and Nyasaland Federation Pound (RHFP)	1956	1965	9	Act of Independence
South Korean Hwan (KRH)	1953	1962	9	Replaced 10:1 KRW
German Handelspermark (DERH)	1939	1948	9	WWII
German Registermark (XRDERM/DERR)	1939	1948	9	WWII
German Reichskreditkassenschein (XDEK)	1939	1948	9	WWII
Sinkiang Yuan (CNSY)	1939	1948	9	Chinese Civil War
Meng Chiang (Bank of Inner Mongolia) Yuan (CNPM)	1936	1945	9	WWII
Peking/Tientsin/Northern China/FRB Yuan (CNPP)	1935	1944	9	WWII
Fiji Old Dollar (FJO)	1865	1874	9	Conquered by Britain
Connecticut Dollar (CCTD)	1783	1792	9	Creation of the USD
Delaware Dollar (CDED)	1783	1792	9	Creation of the USD
Georgia Dollar (CGAD)	1783	1792	9	Creation of the USD
Maryland Dollar (CMDD)	1783	1792	9	Creation of the USD
Massachusetts Dollar (CMAD)	1783	1792	9	Creation of the USD
New Hampshire Dollar (CNHD)	1783	1792	9	Creation of the USD
New Jersey Dollar (CNJD)	1783	1792	9	Creation of the USD
New York Dollar (CNYD)	1783	1792	9	Creation of the USD
North Carolina Dollar (CNCD)	1783	1792	9	Creation of the USD
Pennsylvania Dollar (CPAD)	1783	1792	9	Creation of the USD
Rhode Island Dollar (CRHD)	1783	1792	9	Creation of the USD
South Carolina Dollar (CSCD)	1783	1792	9	Creation of the USD
Virginia Dollar (CVAD)	1783	1792	9	Creation of the USD
Rhodesian Dollar (RHD/ZWC)	1970	1980	10	Act of Independence
French Affars and Issas Franc (AIF)	1967	1977	10	Act of Independence
Bulgarian Socialist Lev (BGM)	1952	1962	10	Replaced 10:1 BGL
India Haj Pilgrimage Rupee (XINP)	1950	1960	10	Replaced with INR
Somali Somalo (SOIS)	1950	1960	10	Replaced with SOS
Greek New Drachma (GRN)	1944	1954	10	Hyperinflation
British Military Authority Lira (LYB)	1941	1951	10	Hyperinflation
Austro-Hungarian Monetary Union Gulden (XATG)	1857	1867	10	Latin Monetary Union
Moldova Ducat (MDD)	1857	1867	10	Discontinued

Appendix W: Demonetized Currencies

Texas Dollar (TXSD)	1836	1846	10	Joined the US
Liberian JJ Dollars (LRDJ)	1989	2000	11	Other War
Ekuele (Epkwele) Guineana (GQE)	1975	1986	11	West African Monetary Union
Reunion Nouveau Franc (REN)	1963	1974	11	Act of Independence
Persian Gulf Rupee (XPGR)	1959	1970	11	Discontinued
Spanish Republican Peseta (ESPR)	1931	1942	11	WWII
Saar Franc (SAAF)	1919	1930	11	WWII
Angola Escudo Portuguese (AOE)	1914	1925	11	Replaced 1.25:1 AOA
Paper Newfoundland Pound (NFLP)	1854	1865	11	Replaced with NFLD
Ghana Revalued Cedi (GHR)	1967	1979	12	Replaced with GHC (Confiscation)
Saint Pierre CFA Nouveau Franc (XCF)	1960	1972	12	Act of Independence
Albanian Lek Foreign Exchange Certificates (ALX)	1953	1965	12	Exchange Certificate
North Korea People's Won (KPP)	1947	1959	12	Hyperinflation
German Behelfszahlungsmittel fuer die Deutsche Wehrmacht (XDEB)	1936	1948	12	WWII
Azerbaijan Manat (AZM)	1993	2006	13	Hyperinflation
Iraqi "Swiss print" Kurdistan Dinar (IQDS)	1991	2004	13	Act of Independence
Argentina Peso Ley 18.188 (ARL)	1970	1983	13	Hyperinflation
Netherlands New Guinea Guilder (NNGG)	1950	1963	13	Act of Independence
Manchukuo Yuan (CNMY)	1932	1945	13	WWII
Soviet Chervonetz (SUC)	1922	1935	13	Discontinued
Ecuador Peso (ECP)	1871	1884	13	Renamed ESC
Paper Paraguay National Peso (PYN)	1857	1870	13	Renamed PYF
New Hampshire Colonial Shilling (CNHC)	1763	1776	13	US War of Independence
Rhode Island Colonial Shilling (CRHC)	1763	1776	13	US War of Independence
Angola Kwanza (AOK)	1977	1991	14	Hyperinflation (Indirect)
Guinea Syli (GNS)	1972	1986	14	Replaced with GNF (92.47% devaluation)
Somali Scellino (SOS)	1960	1974	14	Renamed in 1974
Nigerian Pound (NGP)	1959	1973	14	Act of Independence
Guinea Franc (GNI)	1958	1972	14	Act of Independence
Soviet New Ruble (SUN)	1947	1961	14	Replaced 10:1 SUR
Venezuela Venezolano (VEV)	1873	1887	14	Replaced 1:5 VEB
South German Vereinsgulden (XD SG)	1857	1871	14	Replaced with DEP
Turkmenistan Manat (TMM)	1993	2009	15	Hyperinflation
Sudanese Dinar (SDD)	1992	2007	15	Hyperinflation
Slovenia Tolar (SIT)	1991	2006	15	EURO

Chilean Escudo (CLE)	1960	1975	15	Hyperinflation
French Antilles Franc (XNF)	1960	1975	15	Act of Independence
Burmese Rupee (BUR)	1937	1952	15	Renamed BUK
East Africa Rupee (XEAR)	1905	1920	15	WWI
Crete Drachma (GKD)	1898	1913	15	WWI
Colombian Gold Peso (COG)	1871	1886	15	Hyperinflation
Argentina Peso Fuerte (ARF)	1860	1875	15	Replaced with ARG
Connecticut Shilling New Tenor (CCTN)	1740	1755	15	Act of Independence
Slovak Koruna (SKK)	1992	2008	16	EURO
Timor Escudo (TPE)	1959	1975	16	Act of Independence
British Caribbean Territories (Eastern Group) Dollar (XBCD)	1951	1967	16	Act of Independence
Indonesia New Rupiah (IDN)	1949	1965	16	Hyperinflation
Saint Pierre CFA Franc (XCFG)	1943	1959	16	Hyperinflation
Southern Rhodesian Currency Board Pound (RHSP)	1940	1956	16	Replaced with RHFP at par
Saudi Sovereign Riyal (SAS)	1936	1952	16	Replaced with SAR
Estonia Kroon (EEN)	1924	1940	16	WWII
Danzig Gulden (DZGG)	1923	1939	16	WWII
German Rentenmark (DEN)	1923	1939	16	WWII
Saudi Arabian Riyal (SAA)	1916	1932	16	Formation of the Kingdom of Saudi Arabia
Italian Somaliland Rupiah (SOIR)	1909	1925	16	Replaced with XITL
Bulgarian Lev Srebro (BGS)	1904	1920	16	WWI
Azores Milreis (APM)	1895	1911	16	Hyperinflation
US Paper Dollar (USP)	1862	1878	16	Discontinued
North Korea Foreign Won (KPX)	1978	1995	17	Discontinued
Chinese Soviet Yuan (CNSD)	1931	1948	17	Chinese Civil War
Hankow Dollar (CNDH)	1914	1931	17	WWII
Heilungkiang Tiao (CNHT)	1914	1931	17	WWII
Kansu Dollar (CNDK)	1914	1931	17	WWII
Kirin Tiao (CNKT)	1914	1931	17	WWII
Kwangtung Dollar (CNDG)	1914	1931	17	WWII
Manchurian Dollar (CNDM)	1914	1931	17	WWII
Peking Dollar (CNDB)	1914	1931	17	WWII
Shanghai Dollar (CNDA)	1914	1931	17	WWII
Shantung Dollar (CNDS)	1914	1931	17	WWII
Szechwan Dollar (CNDZ)	1914	1931	17	WWII
Kiau Chau Dollar (KCHD)	1897	1914	17	WWI
Puerto Rican Peso (PRS)	1881	1898	17	Switched to USD

Appendix W: Demonetized Currencies

Spanish Real/Peso Duro (ESR)	1847	1864	17	Replaced with ESE at par
US Continental Dollar (USC)	1775	1792	17	Creation of the USD
Uruguay Peso Nuevo (UYP/UYN)	1975	1993	18	Hyperinflation
Angolan Escudo (AOS)	1958	1976	18	Hyperinflation
Djibouti Franc (DJA)	1949	1967	18	Act of Independence
Chinese Custom Gold Units (CNU)	1930	1948	18	Chinese Civil War
Italian Lira (XITL)	1925	1943	18	WWII
Latvia Lat (LVA)	1922	1940	18	WWII
Lithuanian Lita (LTB)	1922	1940	18	WWII
Riksdaler Riksmunt (SEM)	1855	1873	18	Scandinavian Monetary Union
Chinese US Dollar Foreign Exchange Certificates (CNX)	1979	1998	19	Exchange Certificate
Congo CFA Franc (COF)	1973	1992	19	Act of Independence
Gabon CFA Franc (GAF)	1973	1992	19	Act of Independence
Brazil Cruzeiro Novo (BRB)	1967	1986	19	Hyperinflation
North Viet Nam New Dong (VDN/VNC)	1959	1978	19	Union of Vietnam
Albanian Lek (ALK)	1946	1965	19	Replaced 10:1 ALL
Colombia Paper Peso (COB)	1886	1905	19	Hyperinflation
North German Thaler (XDET)	1838	1857	19	Austro-Hungarian Monetary Union
South German Gulden (XDEG)	1838	1857	19	Austro-Hungarian Monetary Union
Paper French Livre Tournois (FRT)	1701	1720	19	Hyperinflation
Guinea-Bissau Peso (GWP)	1976	1996	20	West African Monetary Union
Luxembourg Convertible Franc (LUC)	1970	1990	20	EURO
Bulgarian Lev Foreign Exchange Certificates (BGX)	1966	1986	20	Exchange Certificate
Cambodia Old Riel (KHO)	1955	1975	20	Discontinued
South Viet Nam Republic Dong (VNR)	1955	1975	20	Hyperinflation
Libyan Pound (LYP)	1951	1971	20	Act of Independence
Belgian Belga (BEB)	1925	1945	20	WWII
Madagascar Franc (MGG)	1925	1945	20	WWII
Czechoslovak Pre-War Koruna (CSO)	1919	1939	20	WWII
Luxembourg Financial Franc (LUL)	1970	1991	21	EURO
Uganda Shilling (UGS/UGW)	1966	1987	21	Hyperinflation
Ghana Pound (GHP)	1958	1979	21	Act of Independence
Laos Old Kip (LAO)	1955	1976	21	Replaced 20:1 LAL
Albania Franga (ALF)	1925	1946	21	Monetary Union with Yugoslavia
Hungarian Pengoe (HUP)	1925	1946	21	Hyperinflation

Russian Gold Ruble (RUER)	1897	1918	21	Russian Civil War
Nicaragua Silver Peso (NIP)	1881	1912	21	Replaced 12.5:1 NIG
Connecticut Colonial Shilling (CCTC)	1755	1776	21	US War of Independence
New Hampshire Shilling New Tenor (CNHN)	1742	1763	21	Act of Independence
Zairean Zaire (ZRZ)	1971	1993	22	Hyperinflation
Mali Franc (MLF/MAF)	1962	1984	22	Act of Independence
Bolivian Peso (BOP)	1963	1986	23	Hyperinflation
Palestine Pound (PSP)	1927	1950	23	Act of Independence
Soviet Gold Ruble (SUG)	1924	1947	23	Replaced 10:1 SUN
Tanu Tuva Aksha (TVAA)	1921	1944	23	WWII
Mozambique Libra Esterlina (MZL)	1919	1942	23	WWII
Yugoslav Serbian Dinar (YUS)	1918	1941	23	WWII
Luxembourg Thaler (LUT)	1848	1871	23	Replaced with LUM
Yugoslav Hard Dinar (YUD)	1966	1990	24	Hyperinflation
German Reichsmark (DER)	1924	1948	24	WWII
Austria Old Schilling (ATO)	1923	1947	24	WWII
Sinkiang Tael (CNST)	1912	1936	24	WWII
Yunnan Yuan (CNY)	1912	1936	24	WWII
Brazil Mil Reis (BRM)	1822	1846	24	Hyperinflation
South Yemeni Dinar (YDD)	1965	1990	25	Union of Yemen
Malaya Dollar (MYAD)	1938	1963	25	Act of Independence
Austro-Hungarian Gulden (ATG)	1867	1892	25	Replaced 1:2 ATK
Paper Riksdaler Banco (SEO)	1830	1855	25	Replaced with SEM
Austro-Hungarian Kronen (ATK)	1892	1918	26	WWI
German East African Rupie (DOAR)	1890	1917	27	WWI
Massachusetts Colonial Shilling (CMAC)	1749	1776	27	US War of Independence
Ghana New Cedi (GHC)	1979	2007	28	Hyperinflation
Lebanon-Syria Pound (XLSP)	1920	1948	28	WWII
Zanzibar Rupee (ZZR)	1908	1936	28	Replaced 1:1.5 XEAS
Maryland Colonial New Shilling (CMDN)	1748	1776	28	US War of Independence
North Carolina Shilling New Tenor (CNCN)	1748	1776	28	US War of Independence
South Carolina Colonial Shilling (CSCC)	1748	1776	28	US War of Independence
Kuan-Tze (Frontier Bills of S'ung)	1131	1159	28	Hyperinflation
Tibet Tangka (TBT)	1912	1941	29	Replaced with TBR
Soviet Hard Ruble (SUR)	1961	1991	30	Breakup of USSR
Polish US Dollar Foreign Exchange Certificates (PLX)	1960	1990	30	Exchange Certificate
Madagascar and Comores CFA Franc (XMCF)	1945	1975	30	Act of Independence

Appendix W: Demonetized Currencies

British West Indies Dollar (XBWD)	1935	1965	30	Act of Independence
Haiti Silver Gourde (HTS)	1814	1844	30	Hyperinflation (Indirect)
New Jersey Colonial Shilling (CNJC)	1746	1776	30	US War of Independence
Ethiopian Dollar (ETD)	1945	1976	31	Act of Independence
Guyana British West Indies Dollar (XBWD)	1935	1966	31	Act of Independence
Rhode Island Shilling New Tenor (CRHN)	1740	1771	31	Act of Independence
Rhode Island Proclamation Shilling (CRHP)	1709	1740	31	Act of Independence
COMECON Transferable Ruble (XTR)	1960	1992	32	Breakup of USSR
Israel Pound (ILP)	1948	1980	32	Act of Independence
Angola Angolar (AOA)	1926	1958	32	Monetary Union with Portugese Colonies
Cameroon Mark (CMDM)	1884	1916	32	WWI
French Indochina Piastre of Commerce (ICFC)	1863	1895	32	Discontinued
Tunisian Franc (TNF)	1858	1891	33	Hyperinflation
Somalia Shilling (SOS)	1960	1994	34	Hyperinflation
Maldiv Islands Rupee (MVP/MVQ)	1947	1981	34	Act of Independence
Mozambique Mil Reis (MZR)	1877	1911	34	Hyperinflation
Colombia Peso Oro (COE)	1837	1871	34	Discontinued
Korea Yen (KROY)	1910	1945	35	WWII
New Hebrides CFP Franc (NHF)	1945	1981	36	Act of Independence
First Mongol Issue (Pao-Ch'ao of Kublai Khan)	1236	1272	36	Hyperinflation
Bulgarian Heavy Lev (BGL/BGK)	1962	1999	37	Hyperinflation
Burmese Kyat (BUK)	1952	1989	37	Act of Independence
Ottoman Empire Piastre (XOTP)	1844	1881	37	Replaced with XOTL
Brazilian Dutch Gulden (BRG)	1624	1661	37	Conquered by Portugal
Second Mongol Issue (Pao-Ch'ao of Chih Yuan)	1272	1309	37	Hyperinflation
Djibouti Franc Germinal (DJG)	1907	1945	38	WWII
Netherlands Indies Gumpyo Gulden (NIDJ)	1905	1943	38	WWII
Ethiopian Silver Talari (ETT)	1893	1931	38	WWII
Union Latine Franc (XULF)	1889	1927	38	Latin Monetary Union
Union Latine Lira (XULL)	1889	1927	38	Latin Monetary Union
Haiti Piastre Gourde (HTT)	1776	1814	38	Replaced by HTS
Finland New Markka (FIM)	1963	2002	39	EURO
Tibet Silver Rupee (TBR)	1912	1951	39	Conquered by China
Rial Hassani (MAH)	1881	1920	39	Replaced with MARR
North Carolina Proclamation Shilling (CNCP)	1709	1748	39	Act of Independence
French Franc (FRF)	1962	2002	40	EURO
Czechoslovak Hard Koruna (CSK)	1953	1993	40	Renamed CZK

Paraguay Paper Peso (PYP)	1903	1943	40	WWII
Malagasy Franc (MGF)	1963	2004	41	Act of Independence
Sudanese Pound (SDP)	1957	1998	41	Other War
South African Pound (ZAP)	1920	1961	41	Act of Independence
Ottoman Empire Gold Lira (XOTG)	1881	1922	41	WWI
Philippine Peso Fuerte (PHF)	1857	1898	41	Act of Independence
Georgia Colonial Shilling (CGAC)	1735	1776	41	US War of Independence
DDR Ostmark (DDM)	1948	1990	42	Breakup of USSR
Iranian Toman (IRT)	1890	1932	42	Replaced with IRR
Peru Peso (PEP)	1821	1863	42	Replaced with PES at par
Maryland Proclamation Shilling (CMDP)	1709	1751	42	Act of Independence
Polish Heavy Zloty (PLZ)	1950	1994	44	Hyperinflation
Tangier Franco (MATF)	1912	1956	44	Act of Independence
Bulgarian Lev Zlato (BGZ)	1880	1924	44	Discontinued
Sao Tome and Principe Mil Reis (STM)	1869	1913	44	Replaced by STE at par
Paper French Colonial Livre (XFCL)	1776	1820	44	Replaced with FRG
Brazil Cruzeiro (BRZ)	1942	1987	45	Hyperinflation
Tonga Pound Sterling (TOS)	1921	1966	45	Act of Independence
Finland Markka (FIN)	1917	1962	45	Hyperinflation
Serbian Dinar (SRBD)	1873	1918	45	WWI
Cape Verde Mil Reis (CVM)	1869	1914	45	Hyperinflation
Massachusetts Old Tenor Proclamation Shilling (CMAP)	1704	1749	45	Act of Independence
South Carolina Proclamation Shilling (CSCP)	1703	1748	45	Act of Independence
East Africa Shilling (XEAS)	1921	1967	46	Act of Independence
Timor Pataca (TPP)	1912	1958	46	Replaced with TPE at par
French West African Franc (XAOF)	1895	1941	46	WWII
Afghanistan Kabuli Rupee (AFR)	1881	1927	46	Replaced 1.1:1 AFA
Hawaii Dollar (HWD)	1847	1893	46	Replaced with USD
Argentina National Peso (XARP)	1816	1862	46	Hyperinflation
Connecticut Shilling Old Tenor (CCTO)	1709	1755	46	Act of Independence
New Caledonia CFP Franc (NCF)	1945	1992	47	Act of Independence
Luxembourg Mark (LUM)	1871	1918	47	WWI
Haiti Paper Gourde (HTP)	1826	1873	47	Hyperinflation (Indirect)
Greek Drachma (GRD)	1954	2002	48	EURO
South Korean Old Won (KRO)	1905	1953	48	Hyperinflation
Costa Rican Peso (CRP)	1848	1896	48	Renamed CRC
Yugoslav Federation Dinar (YUF)	1945	1995	50	Hyperinflation

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North German Vereinsthaler (XDNT)	1857	1907	50	Discontinued
Brazil Reis (BRD)	~1771	1822	51	Hyperinflation
Fiji Pound (FJP)	1917	1969	52	Act of Independence
Trinidad and Tobago Dollar (TTO)	1899	1951	52	Act of Independence
Scandinavian Monetary Union Krona (XSMK)	1872	1924	52	Scandinavian Monetary Union
Paraguay Peso Fuerte (PYF)	1871	1923	52	Discontinued
Western Samoa Pound (WSP)	1914	1967	53	Act of Independence
British West Africa Pound	1913	1966	53	Act of Independence
German Mark (DEP)	1871	1924	53	Hyperinflation
Italian States Lira Austriaca (XITA)	1813	1866	53	Latin Monetary Union
Delaware Colonial Shilling (CDEC)	1723	1776	53	US War of Independence
German Deutsche Mark (DEM)	1948	2002	54	EURO
Maltese Pound (MTP)	1914	1968	54	Act of Independence
Taiwan Yen (TWY)	1895	1949	54	Chinese Civil War
Argentina Gold Peso (ARG)	1875	1929	54	Replaced 1:0.44 ARM
Paper Riksdaler (SER)	1776	1830	54	Replaced with SEO
New Hampshire Old Tenor Proclamation Shilling (CNHP)	1709	1763	54	Act of Independence
Flying 'Cash' (Tang Dynasty)	~806	~860	~54	Suppressed by Government
Austria (New) Schilling (ATS)	1947	2002	55	EURO
Bermuda Pound (BMP)	1914	1970	56	Act of Independence
British North Borneo Dollar (BNBD)	1885	1941	56	WWII
Australian Pound (AUP)	1909	1966	57	Act of Independence
French Oceania (Tahiti) Franc (PFG)	1888	1945	57	WWII
East India Rix Dollar (XEIR)	1808	1865	57	Discontinued
Third Mongol Issue (Pao-Ch'ao of Chih-Ta)	1310	1367	57	Hyperinflation
Mozambique Escudo (MZE)	1922	1980	58	Act of Independence
Chinese Dollar/Yuan (Chungking/Shanghai Yuan) (CND)	1890	1948	58	Chinese Civil War
Montenegro Krone (MEK)	1852	1910	58	Replaced with MEP at par
Union Latine Drachma (XULD)	1868	1927	59	Latin Monetary Union
Union Latine Peseta (XULP)	1868	1927	59	Latin Monetary Union
New Zealand Pound (NZP)	1907	1967	60	Act of Independence
Danish Rigsbankdaler (DKR)	1813	1873	60	Scandinavian Monetary Union
Greenland Riksbankdaler (GLR)	1813	1873	60	Scandinavian Monetary Union
Dominican Republic Silver Peso (DOS)	1844	1905	61	Switched to USD (5:1 exchange)
French Franc Germinal/Franc Poincare (FRG)	1803	1864	61	Latin Monetary Union

Iceland Old Krone (ISJ)	1918	1980	62	Hyperinflation
Portuguese Guinea Escudo (GWE)	1914	1976	62	Act of Independence
Union Latine Franc (XULF)	1865	1927	62	Latin Monetary Union
Union Latine Franc (XULF)	1865	1927	62	Latin Monetary Union
Union Latine Franc (XULF)	1865	1927	62	Latin Monetary Union
Union Latine Lira (XULL)	1865	1927	62	Latin Monetary Union
Massachusetts Bay Shilling (CMAB)	1642	1704	62	Act of Independence
Flying 'Cash' (pien-ch'ien of the S'ung Dynasty)	~960	1023	63	Hyperinflation
Suriname Guilder (SRG)	1940	2003	63	Hyperinflation
Andorra Pesseta (ADP)	1936	1999	63	EURO
Sao Tome and Principe Escudo (STE)	1914	1977	63	Act of Independence
Jamaica Pound (JMP)	1905	1969	64	Act of Independence
New Jersey Proclamation Shilling (CNJP)	1682	1746	64	Act of Independence
Danish West Indies Rigsdaler (DWIR)	1784	1849	65	Replaced with DWIF
Mauritius Dollar (MUD)	1810	1876	66	Replaced with MUR
New Caledonia Franc Germinal (NCG)	1874	1941	67	WWII
New York Proclamation Shilling (CNYP)	1709	1776	67	US War of Independence
Pennsylvania Proclamation Dollar (CPAP)	1709	1776	67	US War of Independence
Virginia Proclamation Shilling (CVAP)	1709	1776	67	US War of Independence
Venezuela Bolivar (VEB)	1940	2008	68	Hyperinflation
Danish West Indies Dalare (DWID)	1849	1917	68	WWI
Luxembourg Gulden (LUG)	1848	1918	70	WWI
East India Company Dollar (XEID)	1788	1858	70	Discontinued
Portuguese Account Conto (PTC)	1931	2002	71	EURO
Argentina Paper Peso Moneda Nacional (ARM)	1899	1970	71	Hyperinflation
El Salvador Peso (SVP)	1847	1919	72	Replaced with SVC at par
Vatican City Lira (VAL)	1929	2002	73	EURO
Bulgarian Lev (BGO)	1879	1952	73	Hyperinflation
Afghanistan Afghani (AFA)	1927	2002	75	Hyperinflation
Belgian Congo Franc (CBEF)	1885	1960	75	Act of Independence
Russian Paper Ruble (RUEP)	1843	1918	75	Russian Civil War
Russian Assignatzia (RUEA)	1768	1843	75	Replaced 3.5:1 RUES
Nicaragua Gold Cordoba (NIG)	1912	1988	76	Hyperinflation
Portuguese Mil Reis (PTM)	1835	1911	76	Hyperinflation
Madeira Islands Milreis (IPM)	1834	1910	76	Replaced with PTE
Thailand Silver Tical (THT)	1851	1928	77	Replaced with THB
Moroccan Franc (MAF)	1881	1959	78	Hyperinflation

Appendix W: Demonetized Currencies

Portuguese India Rupia (INPR)	1881	1959	78	Conquered by India
Guatemala Peso (GTP)	1847	1925	78	Replaced with GTQ
Honduras Peso (HNP)	1847	1926	79	Replaced with HNL
Irish Pound (IEP)	1922	2002	80	EURO
British Honduras Dollar (BZH)	1894	1974	80	Act of Independence
Romania Silver Leu (ROS)	1867	1947	80	Hyperinflation
Netherlands Rijksdaalder (NLX)	1690	1770	80	Replaced with XEIR
Colonial Shilling (XCCS)	1694	1776	82	US War of Independence
Great Ming Precious Notes	1368	1450	< 82	Hyperinflation (at least six different issues)
Turkish Lira (TRL)	1922	2005	83	Hyperinflation
French India Roupie (INFR)	1871	1954	83	Ceded to India
Sarawak Dollar (SWKD)	1863	1946	83	WWII
German States Convention Thaler (XDCT)	1753	1838	85	Convention of Dresden
Newfoundland Dollar (NFLD)	1865	1952	87	Joined Canada
Paper Luxembourgian Franc (LUF)	1914	2002	88	EURO
Straits Settlements Dollar (STSD)	1857	1946	89	WWII
Szechaun Paper (Sixteen Issuing Houses)	1024	1114	90	Hyperinflation
Portuguese Escudo (PTE)	1911	2002	91	Hyperinflation
Pound Sterling (CAP)	1766	1858	92	Act of Independence
French Indochina Piastre (ICFP)	1862	1955	93	Act of Independence
Hyderabad Sicca Rupee (INRH)	1858	1951	93	Replaced with INR
Reunion Franc Germinal (REG)	1851	1944	93	WWII
Greenland Krone (GLK)	1873	1967	94	Discontinued
Portuguese Guinea Mil Reis (GWM)	1879	1974	95	Act of Independence
Taiwan Tael/Dollar (TWT)	1800	1895	95	Conquered by Japan
Bahamas Pound (BSP)	1869	1966	97	Act of Independence
Austro-Hungarian Convention Gulden (XATC)	1759	1857	98	Austro-Hungarian Monetary Union
Bolivia Boliviano (BOL)	1863	1962	99	Hyperinflation
Russian Empire Paper Ruble (RUEP)	1818	1917	99	Russian Civil War
Danish Rigsdaler Courant (DKC)	1713	1813	100	Replaced 5:1 DKR
Hui-Tze (S'ung Dynasty)	1159	1263	104	Hyperinflation
Ceylon Rupee (LNR)	1872	1978	106	Act of Independence
Algerian Franc Germinal (DZG)	1851	1959	108	Hyperinflation
Chilean Peso/Condor (CLC)	1851	1959	108	Hyperinflation
Franc Guiana (GUF)	1851	1959	108	Act of Independence
Guadeloupe Franc (GPF)	1851	1959	108	Act of Independence
Martinique Franc (MQF)	1851	1959	108	Act of Independence

Mongol First Issue	1260	1368	108	Hyperinflation
Greek Silver Drachma (GRS)	1833	1944	111	WWII
Paper Daler (SEP)	1665	1776	111	Replaced with SER
Uruguay Peso Fuerte (UYF)	1862	1975	113	Hyperinflation
Portuguese Reis (PTR)	1797	1911	114	Hyperinflation
Ecuador Sucre (ECS)	1884	2000	116	Switched to USD
Netherlands East Indies Guilder (IDDG)	1828	1945	117	WWII
Italian Lira (ITL)	1882	2002	120	EURO
Peru Sol (PEH)	1864	1985	121	Hyperinflation
Spanish Peseta (ESP)	1874	2002	128	EURO
Austrian Paper Gulden (ATP)	1753	1892	139	Replaced 1:2 ATK
Belgian Franc (BEF)	1835	2002	167	EURO
Mexico Silver Peso (MXP)	1822	1992	170	Hyperinflation
Netherlands Guilder (NLG)	1814	2002	188	EURO

Appendix X: World's largest money-collecting organizations

(Based on latest data available in mid-2019¹³²)

Amounts collected by governments in this list include all forms of government within each nation, including national, state or provincial, and local.

[From files: CorpsAndCountriesByRevenue.xlsx
CorpsAndCountriesByRevenue2.xlsx]

Sources:

Wikipedia:

[List of countries by government budget](#)

[List of largest private non-governmental companies by revenue](#)

Forbes:

[The World's Largest Public Companies](#)

[America's Largest Private Companies](#)

CIA World Factbook:

REFERENCES :: GUIDE TO COUNTRY COMPARISONS

(Dollars in millions, meaning that #1-ranked United States took in over \$6 Trillion, and the #500-ranked Eli Lilly took in over \$24 Billion)

Rank	Country or Corporation	Revenues
1	United States	\$ 6,028,001
2	China	3,312,308
3	Japan	1,678,000
4	Germany	1,598,000
5	France	1,334,000
6	United Kingdom	1,077,300
7	Italy	884,500
8	Canada	623,700
9	Brazil	618,853
10	India	544,422
11	Walmart	514,400

¹³² Yes, this set of books was created over years and re-creating lists such as this with the latest data did not seem worth it to the author.

12	Spain	492,400
13	Australia	461,000
14	Sinopec	399,700
15	Royal Dutch Shell	382,600
16	Korea, South	351,600
17	Netherlands	344,800
18	PetroChina	322,800
19	BP	299,100
20	Mexico	292,800
21	ExxonMobil	279,200
22	Volkswagen Group	278,200
23	Sweden	274,800
24	Toyota Motor	272,100
25	Vitol	270,000
26	Apple	261,700
27	Saudi Arabia	260,000
28	Russia	253,900
29	Belgium	249,700
30	Berkshire Hathaway	247,800
31	Amazon	232,900
32	UnitedHealth Group	231,400
33	Switzerland	223,500
34	Samsung Electronics	221,500
35	Glencore International	219,800
36	Norway	214,300
37	McKesson	213,500
38	Austria	197,800
39	Daimler	197,400
40	CVS Health	194,100
41	Total	184,200
42	China State Construction Engineering	178,800
43	ICBC	175,900
44	Hon Hai Precision	175,600
45	Turkey	173,900
46	Denmark	173,500
47	AmerisourceBergen	172,900
48	AT&T	170,800
49	EXOR	169,100
50	Ford Motor	160,300
51	Chevron	158,700
52	Ping An Insurance Group	151,800
53	China Construction Bank	150,300
54	Costco Wholesale	147,200
55	General Motors	147,000
56	Honda Motor	142,600
57	Cardinal Health	141,900
58	AXA Group	139,700
59	Agricultural Bank of China	137,500

Appendix X: World's largest money-collecting organizations

60	Alphabet	137,000
61	Finland	136,800
62	Walgreens Boots Alliance	136,100
63	SAIC Motor	135,200
64	Fiat Chrysler Automobiles	133,400
65	JPMorgan Chase	132,900
66	Verizon Communications	130,900
67	Indonesia	130,600
68	Gazprom	128,400
69	Lukoil	127,900
70	Trafigura	127,600
71	Mitsubishi	127,400
72	Bank of China	126,700
73	Argentina	123,300
74	General Electric	121,600
75	Kroger	121,200
76	Cargill	120,000
77	Fannie Mae	119,100
78	Allianz	118,800
79	Microsoft	118,200
80	Valero Energy	117,000
81	Japan Post Holdings	115,600
82	BMW Group	115,000
83	Koch Industries	115,000
84	Rosneft	112,900
85	Bank of America	111,900
86	China Mobile	111,800
87	Phillips 66	111,300
88	China Railway Group	110,500
89	China Railway Construction	109,100
90	Nissan Motor	108,700
91	Home Depot	108,200
92	Nippon Telegraph & Tel	107,500
93	JXTG Holdings	101,800
94	BNP Paribas	101,600
95	Wells Fargo	101,500
96	Boeing	101,100
97	Citigroup	100,000
98	China Life Insurance	98,300
99	Siemens	98,300
100	Marathon Petroleum	96,100
101	Schwarz Group	96,000
102	Petrobras	95,700
103	Greece	95,360
104	Comcast	94,500
105	Nestlé	93,400
106	Taiwan	93,000
107	Portugal	92,990

108	Israel	92,820
109	South Africa	92,380
110	SK Holdings	92,200
111	Uniper	92,200
112	Anthem	92,100
113	Generali Group	92,100
114	Carrefour	91,900
115	Itochu	91,600
116	Poland	90,800
117	Dell Technologies	90,400
118	Santander	89,500
119	Eni	89,400
120	Deutsche Telekom	89,300
121	Hyundai Motor	88,000
122	Peugeot	87,300
123	Enel	86,300
124	Softbank	86,200
125	Aldi	86,000
126	DowDuPont	86,000
127	Hitachi	85,800
128	Ireland	85,410
129	Colombia	85,140
130	Tesco	84,300
131	Czech Republic	83,620
132	United Arab Emirates	83,440
133	Thailand	82,000
134	Johnson & Johnson	81,600
135	EDF	81,400
136	Reliance Industries	79,700
137	IBM	78,700
138	Robert Bosch	78,000
139	Equinor	77,900
140	Venezuela	77,890
141	Iran	77,220
142	Aeon	77,100
143	Sony	76,900
144	BASF	76,200
145	ArcelorMittal	76,000
146	Target	75,400
147	AIRBUS	75,200
148	Royal Ahold Delhaize N.V.	74,100
149	People's Insurance	73,900
150	Panasonic	73,800
151	China Communications Construction	73,600
152	New Zealand	73,200
153	Deutsche Post	72,600
154	PTT PCL	72,300
155	United Parcel Service	71,900

Appendix X: World's largest money-collecting organizations

156	China Evergrande Group	71,700
157	ENGIE	71,500
158	Lowe's	71,300
159	State Farm	71,200
160	Intel	70,800
161	Freddie Mac	70,700
162	JD.com	69,800
163	FedEx	69,200
164	CITIC	68,000
165	Marubeni	67,800
166	Renault	67,700
167	MetLife	66,900
168	Procter & Gamble	66,900
169	United Technologies	66,500
170	Hong Kong	66,190
171	PepsiCo	65,000
172	Bank of Communications	64,800
173	Louis Dreyfus Company	64,700
174	Archer Daniels Midland	64,300
175	HSBC Holdings	64,300
176	Indian Oil	64,300
177	Iraq	63,970
178	Hungary	63,630
179	Munich Re	62,900
180	Banco Bradesco	62,600
181	Seven & I Holdings	61,500
182	Prudential Financial	61,300
183	Postal Savings Bank Of China (PSBC)	61,000
184	Toyota Tsusho	61,000
185	Centene	60,100
186	Unilever	60,100
187	Couche Tard	59,700
188	Peru	59,660
189	Sysco	59,600
190	Walt Disney	59,400
191	Dai-ichi Life Insurance	59,100
192	Posco	59,000
193	Repsol	58,800
194	Albertsons	58,700
195	HP	58,700
196	Romania	58,500
197	Roche Holding	58,100
198	Telefónica	57,700
199	Brookfield Asset Management	57,600
200	China Telecom	57,100
201	Humana	56,900
202	Chile	56,730
203	Country Garden Holdings	56,700

204	Mitsui	56,600
205	Tokyo Electric Power	56,100
206	Long & Foster	56,000
207	Facebook	55,800
208	LG Electronics	55,700
209	Christian Dior	55,200
210	Korea Electric Power	55,100
211	China Merchants Bank	54,900
212	Caterpillar	54,700
213	Anheuser-Busch InBev	54,600
214	Vietnam	54,590
215	Nippon Steel	54,500
216	China Pacific Insurance	54,100
217	Legend Holding	54,100
218	Vodafone	53,900
219	Itaú Unibanco Holding	53,800
220	Lockheed Martin	53,800
221	Mitsubishi UFJ Financial	53,700
222	Pfizer	53,600
223	Singapore	53,400
224	América Móvil	53,100
225	Kuwait	52,870
226	Sumitomo Mitsui Financial	52,500
227	Continental	52,400
228	Cuba	52,360
229	Credit Agricole	52,200
230	VINCI	52,100
231	Algeria	52,080
232	Alibaba	51,900
233	Novartis	51,900
234	Sinopharm Group	51,900
235	Sberbank	51,600
236	Malaysia	51,230
237	Goldman Sachs Group	51,000
238	Greenland Holdings Group	50,900
239	Morgan Stanley	50,900
240	Cisco Systems	50,800
241	Lenovo Group	50,000
242	Shanghai Pudong Development	50,000
243	Oil & Natural Gas	49,900
244	Industrial Bank	49,700
245	JBS	49,700
246	HNA Technology	49,600
247	SK Innovation	49,500
248	Société Générale	49,500
249	Saint-Gobain	49,300
250	KIA Motors	49,200
251	Denso	48,800

Appendix X: World's largest money-collecting organizations

252	Orange	48,800
253	Cigna	48,600
254	Tokio Marine Holdings	47,700
255	CNP Assurances	47,600
256	State Bank of India	47,500
257	American International Group	47,200
258	Tencent Holdings	47,200
259	Sumitomo	46,900
260	Zurich Insurance Group	46,900
261	Bayer	46,700
262	China Minsheng Banking	46,700
263	HCA Healthcare	46,700
264	RBC	46,300
265	MS&AD Insurance	46,200
266	KDDI	45,800
267	Bunge	45,700
268	Pakistan	45,640
269	China Citic Bank	45,600
270	Materials Industry Zhongda Group	45,400
271	Saudi Basic Industries	45,100
272	Delta Air Lines	44,900
273	Tata Motors	44,900
274	Volvo Group	44,900
275	Philippines	44,740
276	Wilmar International	44,700
277	American Airlines Group	44,500
278	Pegatron	44,400
279	Hanwha	44,300
280	Finatis	44,200
281	China Unicom	44,100
282	Charter Communications	43,600
283	American Express	43,300
284	ThyssenKrupp Group	43,300
285	Grupo ACS	43,200
286	Metallurgical Corp of China	43,200
287	Best Buy	42,900
288	UBS	42,900
289	Woolworths	42,900
290	BHP Group	42,600
291	Accenture	42,500
292	Jardine Matheson	42,500
293	TD Bank Group	42,500
294	Deutsche Bank	42,300
295	Deutsche Lufthansa	42,300
296	Merck & Co.	42,300
297	Banco do Brasil	42,000
298	Bouygues	41,900
299	United Continental Holdings	41,900

300	Power Construction Corporation of China	41,800
301	IKEA	41,600
302	Talanx	41,600
303	Mitsubishi Electric	41,500
304	Qatar	41,470
305	Iberdrola	41,400
306	China Vanke	41,100
307	GlaxoSmithKline	41,100
308	Magna International	40,800
309	Sanofi	40,700
310	Rio Tinto	40,500
311	Honeywell International	40,300
312	Baoshan Iron & Steel	40,000
313	Power Corp of Canada	40,000
314	Tyson Foods	40,000
315	Idemitsu Kosan	39,900
316	Midea Group	39,800
317	Centrica	39,600
318	Fresenius	39,600
319	Oracle	39,600
320	World Fuel Services	39,600
321	AIA Group	39,500
322	Wanda Group	39,500
323	ING Group	39,400
324	Allstate	39,100
325	Xiamen C&D	39,100
326	LyondellBasell Industries	39,000
327	Møller-Maersk	39,000
328	TJX Cos	39,000
329	J Sainsbury	38,900
330	Nike	38,700
331	China Shenhua Energy	38,400
332	Deere & Company	38,400
333	Aviva	37,900
334	Mitsubishi Heavy Industries	37,700
335	George Weston	37,500
336	Swiss Re	37,300
337	Tech Data	37,200
338	Slovakia	37,090
339	Suning.com	36,900
340	Deloitte	36,800
341	SK Hynix	36,800
342	Vale	36,800
343	Daiwa House Industry	36,700
344	Aisin Seiki	36,600
345	Bharat Petroleum	36,500
346	ConocoPhillips	36,400
347	Exelon	36,400

Appendix X: World's largest money-collecting organizations

348	General Dynamics	36,200
349	Enbridge	36,100
350	Fujitsu	36,100
351	PricewaterhouseCoopers	35,900
352	Canon	35,800
353	JFE Holdings	35,700
354	Ukraine	35,600
355	Angola	35,590
356	Egypt	35,540
357	CK Hutchison	35,400
358	Mitsubishi Chemical	35,300
359	Lloyds Banking Group	35,200
360	E.ON	35,100
361	Poste Italiane	35,100
362	Suzuki Motor	35,100
363	Xiamen Xiangyu	35,100
364	Ernst & Young	34,800
365	Toshiba	34,400
366	ABB	34,300
367	Taiwan Semiconductor	34,200
368	Kazakhstan	34,130
369	Credit Suisse Group	34,100
370	Quanta Computer	34,100
371	CNOOC	33,900
372	Progressive	33,900
373	China Energy Engineering	33,800
374	Wesfarmers	33,800
375	Prudential	33,300
376	Bridgestone	33,100
377	China Everbright Bank	33,100
378	Mizuho Financial	33,100
379	China National Building	33,000
380	Mars	33,000
381	3M	32,800
382	AbbVie	32,800
383	Schlumberger	32,800
384	British American Tobacco	32,700
385	Capital One Financial	32,700
386	Chubb	32,600
387	CRRC	32,600
388	Bank of Nova Scotia	32,400
389	Jiangxi Copper	32,400
390	Publix	32,360
391	Ecuador	32,300
392	Bechtel	32,300
393	Metro Group	32,300
394	Compal Electronics	32,100
395	Mazda Motor	32,100

396	Hyundai Mobis	31,900
397	L'Oréal	31,800
398	Coca-Cola	31,700
399	CRH	31,600
400	BT Group	31,500
401	Sompo	31,500
402	Commonwealth Bank	31,400
403	Air France-KLM	31,300
404	UniCredit	31,100
405	Aegon	30,900
406	Compass Group	30,900
407	Abbott Laboratories	30,700
408	Inditex	30,700
409	Hewlett Packard Enterprise	30,600
410	Medtronic	30,600
411	Veolia Environnement	30,600
412	Xiamen International Trade Group	30,500
413	PKN Orlen	30,400
414	Schneider Electric	30,300
415	Travelers	30,300
416	Northrop Grumman	30,100
417	SSE	30,100
418	Micron Technology	30,000
419	Arrow Electronics	29,700
420	CNH Industrial	29,700
421	Suncor Energy	29,700
422	Kansai Electric Power	29,500
423	Koç Holding	29,500
424	Philip Morris International	29,500
425	Wistron	29,500
426	Johnson Controls International	29,400
427	Danone	29,100
428	SAP	29,100
429	Subaru	29,100
430	Westpac Banking Group	29,100
431	Cathay Financial	28,900
432	International Airlines	28,800
433	Medipal Holdings	28,800
434	Naturgy Energy Group	28,700
435	Sumitomo Electric	28,700
436	Gree Electric Appliances	28,500
437	Manulife	28,400
438	BBVA-Banco Bilbao Vizcaya	28,300
439	Samsung C&T	28,300
440	Adecco	28,200
441	Barclays	28,200
442	Intesa Sanpaolo	28,100
443	LafargeHolcim	28,100

Appendix X: World's largest money-collecting organizations

444	Randstad Holding	28,100
445	Reyes Holdings	27,800
446	Luxembourg	27,600
447	Anglo American	27,600
448	ANZ	27,500
449	KB Financial Group	27,400
450	China Taiping Insurance	27,300
451	Financiere de l'Odet	27,200
452	PBF Energy	27,200
453	Chubu Electric Power	27,100
454	East Japan Railway	27,100
455	OMV Group	27,100
456	Rajesh Exports	27,100
457	Raytheon	27,100
458	Bangladesh	27,080
459	C&S Wholesale	27,000
460	Poly Developments & Holdings Group	27,000
461	Aluminum Corp of China	26,900
462	Samsung Life Insurance	26,900
463	CJ Corporation	26,800
464	Qingdao Haier	26,800
465	Morocco	26,630
466	Nokia	26,600
467	Flex	26,500
468	Heineken	26,500
469	Xiaomi	26,400
470	INTL FCStone	26,300
471	Kraft Heinz Company	26,300
472	NEC	26,300
473	Bank of Montreal	26,200
474	Michelin Group	26,000
475	Adidas	25,900
476	Mondelēz International	25,900
477	China Grand Automotive Services	25,800
478	Croatia	25,790
479	Macy's	25,700
480	US Bancorp	25,700
481	Dollar General	25,600
482	LG Chem	25,600
483	Ceconomy	25,500
484	Formosa Petrochemical	25,500
485	Huaneng Power International	25,400
486	Shanghai Construction	25,400
487	Cosmo Energy Holdings	25,300
488	NAB - National Australia Bank	25,300
489	Starbucks	25,300
490	Mapfre	25,200
491	Femsa	25,100

492	Nucor	25,100
493	Onex	25,100
494	H-E-B	25,000
495	Air Liquide	24,800
496	RWE Group	24,800
497	Safran	24,800
498	Ultrapar Participacoes	24,800
499	Sodexo	24,700
500	Eli Lilly	24,600

Appendix Y: Chained Reaction

Once the Debt Standard was fully established in 1971, the consequences that follow became inevitable, placing humanity in a chained reaction. Each idea in this list is a very brief summary of the detail in the listed chapter. *The Three Facts in Chapter 7: The nature of our money and its main source* need to be understood for this list to be useful.

The Debt Standard fully established: In 1971, commercial banks plus central banks (the bank cartel) became the sole creators, by making loans, of national currencies. Thus, the last remnant of the Gold Standard was replaced with the Debt Standard. (*Chapter 7: The nature of our money and its main source*)

All money is debt: Under the Debt Standard, for something to count as money, it must be an asset for one, and a liability for another, also known as debt: one party owes, and another party is owed. All national currencies are IOU's, bank credits. (*Chapter 7: The nature of our money and its main source*)

Corporate currency, bank credits: Under the Debt Standard, almost all of the money that people, businesses, and state/provincial/local governments use is created by loans (mortgages, auto loans, business loans, credit card loans, etc.) from commercial, for-profit banks—that is, corporations—so it is accurate to call our money *corporate currency* or *bank credits*. (*Chapter 7: The nature of our money and its main source*)

No level playing field: One small group, the bank cartel, creates money from nothing; everyone else has to **work** for it (or borrow it first from the banks and then work to pay it back with interest). How can that possibly be a level playing field? (*Chapter 13: Theft of fair play: There is no level playing field, which guarantees conflict*)

Money flows most easily to banks: Banks charge interest on the money they conjure from nothing, and everyone needs money, so money (in the form of interest payments) flows more easily to the bank cartel than any other group. (*Chapter 14: Money flows most easily, automatically, to the banking sector*)

*We **rent** our money:* We don't own our money, the banks own it. We rent it from the bank cartel. The electronic money we rent is held captive in bank accounts. Payments cause money to move one bank account to another. (Paper money is a small and dwindling part of payment transactions.) (*Chapter 15: We don't own money, we rent it from the bank cartel*)

The supply of money must always grow: When money is debt, the supply of it must always grow. Why? Because we must repay outstanding loans *plus interest*. A loan of \$10,000 might require \$10,500 to be fully repaid. The initial loan created the \$10,000; the \$500 of interest must be created by other loans. With hundreds of millions of loans outstanding, the total amount due (paying back the loans plus interest) always grows. This requires an ever-increasing supply of money, which can only be created by ever-increasing loans. (*Chapter 16: When money is debt, the supply of it must always grow*)

A crushing debt burden: Since loans must always grow, we have ended up with a world with over \$313 Trillion of outstanding loans (in late 2023), growing exponentially. The interest alone due each year is at least \$12 Trillion, four times more than the world pays for oil. This is a crushing burden on people, businesses, and governments. And it continually gets worse. (*Chapter 17: Theft of choice: A crushing burden of debt*)

Accelerating wealth inequality (Theft of money): Gargantuan interest payments guarantee not just wealth inequality, but *accelerating* wealth inequality. Why? Because most interest payments go to banks and those who already own sufficient assets to make loans; everyone else pays interest to them. Globally, the “bottom 80%” likely pays over \$5 Trillion per year in interest collected by the “top 10%.” (Chapter 18: *Accelerating wealth inequality by design (The money harvesting machine)*)

Stock ownership propels further inequality: In the US, the “top 20%” own 93% of all shares, thus profiting from the purchases of all of us, the work efforts of all corporate employees, dividends paid to shareowners, and capital gains when share prices rise. (Chapter 18: *Accelerating wealth inequality by design (The money harvesting machine)*)

Real estate ownership accelerates it further: In the US, the “top 10%” own 82% of all non-home real estate. Thus, everyone else pays rent to these owners; for example, when you buy at a retail shop, you help the shop owner pay their rent. (Chapter 18: *Accelerating wealth inequality by design (The money harvesting machine)*)

A money-harvesting, re-distribution system: Our money system is not broken, as some claim, it is working as designed: It is a giant money-harvesting machine, automatically and relentlessly pumping money from those who have less to those who have more. It is the anti-Robin Hood, taking from the poorer and giving to the richer. A debt-based money system is an automated money re-distribution system working to dramatically increase the financial wealth of the already-rich. (Chapter 18: *Accelerating wealth inequality by design (The money harvesting machine)*)

Perennial price inflation is theft of freedom: As the supply of money must perpetually grow (faster than real world production), its purchasing power declines, bringing persistent price inflation. For the affluent, price inflation may be annoying, but their increasing expenses are usually more than offset by price gains in their assets. For those whose basic expenses match or exceed their income (that is, the vast majority of people on the planet), price inflation is devastating, relegating them to perpetual financial struggle, often forcing them to decide which basic needs to forego. In such a struggle, people have little choice but to “keep their head down,” keep a job for which they are ill-suited, put up with abusive bosses, etc. *This may be the most widespread anti-freedom mechanism on the planet today.* This enables those who own the system to corral most people’s labor, time, energy, good will, and so forth. (Chapter 19: *Theft of freedom: Price inflation*)

From stability to perpetual emergency (Theft of calm): Since full adoption of the Debt Standard in 1971, we have had **eight times** more national banking crises per year than we used to have in the 1800’s when money was real. Our gargantuan debt load has moved us from relative stability to perpetual financial crises. (Chapter 20: *Theft of stability, predictability: The crisis generator*)

We are addicted to financialized materialistic growth: Because there must always be more debt to repay existing debt plus interest, we are addicted to creating perpetual “economic growth” (actually, debt creation) despite the environmental damage and risks caused by our current methods of pursuing materialistic growth. (Chapter 21: *Theft of nature’s brilliance: Addiction to growth*)

The conflict generator: Accelerating income inequality, debt slavery, addiction to financial growth, constant financial struggle for so many, competition for natural resources—all lead to a world overloaded with conflict. (Chapter 22: *Theft of peace: Addiction to conflict*)

Theft of time: As humankind's debt load must and does continually grow, more and more effort must go into repaying all of those loans, and to paying the increasing taxes demanded by governments to pay back *their* growing debt. This is a strong contributor to why everyone feels so busy these days, like there is never enough time. (*Chapter 23: Theft of time*)

Real-for-Unreal: People, businesses, and countries are still expected to provide the real (work, time, energy, know-how, materials, products, ...) in exchange for bank credits that are unreal (paper notes with pictures and numbers, or electronic credits). (*Chapter 24: The Debt Standard: Real-for-paper instead of real-for-real*)

Debt jubilees (now bailouts), formerly for the poor, are now for the rich and powerful ("Socialism for the rich"): There are over thirty documented debt jubilees for the poorest in societies from 2400BCE to 1400BCE. Jubilees were considered a restoration of balance without which the stable functioning of society was threatened. Now, Big Owners get debt jubilees in the form of bailouts. In the rare case of the poor getting anything from a bailout (for example, the bailouts during the pandemic starting in 2020 actually routed some money to regular people, not just big organizations), it's a pittance compared with what large organizations receive. (*Chapter 27: Debt jubilees, formerly for the poor, are now for large organizations*)

Domination by banks: When money is debt whose supply can only grow by the growth of loans, we guarantee societal domination by banks because every bank loan is a liability—a debt—for the borrower; and an asset for the bank. (*Chapter 28: Domination by banks*)

Domination by Big: When banks become Big, they strongly prefer to lend to Big. So they provide plentiful and cheap (low-interest) loans to Big organizations and the wealthy. Loans to small organizations are denied or have a far higher interest-rate cost. Thus, for-profit banks decide much about who and what gets funded, deeply impacting the nature of our society and culture, with fast profit as their prime driving force. This enables Big to increase its domination. (*Chapter 29: Theft of community: Domination by banks results in domination by Big*)

Theft of Democracy: Economic elites and Big organizations now dominate our political process in almost every capitalist and socialist country, meaning that Big selects candidates and office-holders and now writes the laws so that the laws favor Big, continually enhancing their dominance. (*Chapter 30: Theft of democracy*)

When Big writes the laws: When Big writes the laws, money and corporations can roam the Earth at will; workers cannot. Wages are taxed immediately; taxes on money made from money are taxed at reduced rates, deferred, or not taxed at all. Accounting rules classify as a *loss* any flow of money (employee salaries, local taxes, and so forth) that does not go to the owners. Corporate law reinstates medieval rules of ownership and turns "free market economics" on its head: employees do not get to keep what they earn; the shareowners do. (*Chapter 31: Theft of free markets: When Big writes the laws*)

Big banks write laws so that they get a cut of all money flows: Fashioning laws over generations, banks, like organized crime, now commandeer a "cut"—in interest payments and/or fees—on all big money flows on the planet via mortgages, vehicle loans, business loans, leases, credit and debit cards, loans to "investors," loans for stock buybacks, fees for currency exchanges, and so forth. (*Chapter 32: The invasion of the money snatchers*)

Harvesting crises: Since money became debt, we have repeating boom/bust cycles. Big Money makes money on the way up, during the boom, as their asset prices climb. Then they sell, and make bets on asset price declines, to make money from the inevitable bust. Then

they pick up cheap assets during the crisis from those who could not pay their loans or who sell in a panic. The boom/bust cycle concentrates capital in the hands of the few with vast capital. (*Chapter 33: Harvesting the crises: Booms, bubbles, and busts*)

Forced to speculation in the casino: When people see that cash savings continually lose purchasing power, they feel forced to put their savings into speculative markets in which they are at a major disadvantage versus professional trading firms such as Big Banks. Rarely do people achieve the gains advertised by the casino, in which “the house” always wins. (*Chapter 34: Casino economies, Part 1—Individuals*)

Speculative (casino) versus productive societies: When banks can lend as they see fit, they decide who gets loans and who does not, dominating the nature of economy, and impacting the culture. These banks gravitate toward activities with the fastest/largest profits for the banks, often involving speculation. When government restricts banks to lending for productive purposes only, the society orients toward production, which requires an educated and healthy workforce, and is generally a requirement for what are known as *miracle economies* that truly do show a “rising tide lifting all boats.” When banks can lend for speculation, the economy becomes a casino. (*Chapter 35: Casino economies, Part 2—Productive versus speculative societies*)

The Debt Standard is unsustainable: National governments have increased their debt load seven-fold just in this century. The US government is borrowing and spending \$1 Trillion more than it collects in taxes every 100 days. The world adds more than three times more debt than economic growth each year. Accelerating cyber-theft may be taking as much as 10% of the global economy. This is not sustainable! The fact that the system requires nearly continuous bailouts shows that *The Great Burning* of financial assets has already begun, and that it is highly likely accelerate, bursting what many call the *Everything Bubble* (real estate, stocks, bonds, currencies, derivatives, and so forth). (*Chapter 36: Is The Great Burning probable? Inevitable?*)

Energy Extraction Machine: All told, the system is a *debt pyramid* designed to extract energy from the mineral, plant, animal, and human kingdoms for the benefit of those who own the system and secondarily, for those whose primary function is operate, defend, or justify the system.

Links

A standard bibliography is not appropriate for this book. Below is a list of links to websites with posts or books that have influenced my thinking on this Debt Standard topic, or because they were cited in the book. I thank them all.

Please note well that this list includes people from all over the economic and political thought spectrum, something I consider essential for effective research. If you are greatly offended that I list a web site by which you are offended, please, open your mind: A great idea is a great idea, no matter how it found its way onto this planet. There are web sites I read to keep abreast of the latest in strains of thought with which I *disagree*. Limiting oneself to a particular dogma creates a mental box with no exit. I continually work to jettison all dogma.

Life help us and all those who seek truth.

* * *

Committee for Vanquishing Financial Problems Once and for All (those who provide brilliant help but wish to remain anonymous)

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