A PANOPTICPROTOCOL COMMENTARY

Broken Money

Money is a ledger. Whoever keeps it holds the power. Lyn Alden's history of that ledger, read for crypto.

COMMENTARY | NOT A SUMMARY | READ FOR CRYPTO

In September 2022, people in Lebanon started robbing banks. Most of them were stealing their own money.

One was an interior decorator who walked into a Beirut branch with a fake gun to get her family's savings out for her sister's cancer treatment. The bank had frozen the account. She was not a criminal. She was a depositor.

5,000
years of ledgers
the first writing was accounting

160
national currencies
and not one is backed by anything

98%
of the dollar, gone
measured against gold since 1933

3000 BC	**600 BC**	**1494**	**1858**	**1971**	**2009**
Clay tablets	Coins	Double entry	The telegraph	Gold cut loose	Digital bearer

Lyn Alden spent four years and four hundred citations answering one question: **how did money end up like this?** Her answer is not about greed or conspiracy. It is about a piece of wire.

> **Read the book.** *Broken Money*, Lyn Alden, Timestamp Press, 2023. Every fact and figure here comes from it. This guide is our reading of her argument, not a replacement for it.

START HERE

The whole argument in 60 seconds

If you read one page, read this one. Everything after is the evidence.

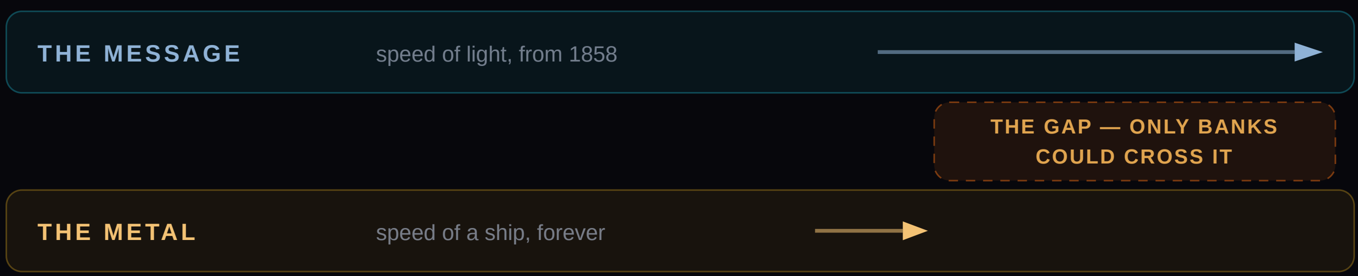
1. **Money is a ledger**
   Not gold, not paper — a record of who owns what. The oldest writing humans ever made was exactly this: 5,000-year-old clay tablets listing who owned which sacks of grain.

2. **Someone has to keep that ledger**
   Either people keep it (credit, banks, currencies) or nature keeps it (gold, where holding the thing *is* the record). Human ledgers are convenient. They also get rewritten.

3. **In 1858 the ledger split in two**
   The telegraph let a payment instruction cross an ocean in minutes. Gold still crossed it by ship. For the first time in history, **messages moved faster than money**.

4. **Only banks could bridge the gap**
   So gold got locked in vaults and replaced by paper claims that could travel at wire speed. The claims multiplied. The metal did not. In 1971 the last link was cut.

5. **In 2009 the gap closed**
   For the first time, something scarce could settle at the speed of the message itself. Whether that fixes anything is the open question the last third of the book argues about.



⚡ SEND THIS TO A FRIEND

Gold didn't lose because it was less scarce. It lost because it couldn't travel at the speed of light.

NO JARGON

Four words, in plain English

You do not need to know a thing about finance to read this guide. Here is the whole vocabulary, in two pages.

A ledger

A record of who owns what. Your bank statement is one. A clay tablet listing sacks of grain is one. So is a gold coin in your hand — holding it **is** the entry. Every argument in this book is about who gets to write in the ledger.

IN SHORT Alden's whole point: money is not a thing, it is a record.

Fiat currency

Money that is money because a government says so, backed by nothing you can redeem it for. Every one of the world's roughly 160 currencies is now fiat. The last country to leave a gold standard was Switzerland, in 1999.

IN SHORT A ledger kept by people, who can add a line whenever they choose.

Base money vs broad money

Base money is what the central bank makes: physical notes and the reserve accounts banks hold at it. **Broad money** is what you have: your current account, your savings. They are different things, and mixing them up is why most inflation arguments go wrong.

IN SHORT In 1913 the US had $19bn of broad money. At the end of 2022, $21.4 trillion.

Settlement

The moment a payment is truly final and cannot be reversed. Sending an instruction is fast; settling it is the slow part. Cards and bank transfers move a promise now and settle later, through several intermediaries.

IN SHORT The gap between the promise and the settlement is where this whole story happens.

THE ONE SENTENCE TO HOLD ON TO

If money is a ledger, then the real question is never **"what is money worth?"** It is **"who is allowed to write in the book, and what stops them writing themselves a line?"**

⚡ SEND THIS TO A FRIEND

Money isn't a thing you hold. It's a record of what you're owed — and someone always keeps that record.

NO JARGON

…and the four that explain the anger

These four are why the system feels rigged to people who cannot say exactly why.

The Cantillon effect

New money does not reach everyone at once. Whoever gets it first spends it at yesterday's prices. Whoever gets it last finds the prices already moved and has to ask for a raise. Being near the tap is the whole advantage.

IN SHORT Named after Richard Cantillon, who described it in the 1700s. Nothing about it is new.

Reserve currency

The money the rest of the world uses to trade and to save, even between two countries that are not yours. The dollar is used in roughly 90% of currency trading and about half of all cross-border loans and trade invoicing.

IN SHORT It sounds like pure privilege. Alden argues it is also a trap — see section 06.

Stablecoin & CBDC

A **stablecoin** is a private digital token that a company promises is worth one dollar, backed by dollars it holds. A **CBDC** is the same idea run by a central bank — the state's own currency, fully digital and fully programmable.

IN SHORT One is a dollar bank account for people whose own bank failed them. The other is a dollar the issuer can switch off.

Inflation

People use one word for two different things: **prices going up**, and **the amount of money going up**. They are not the same and they do not move together. Official price inflation in the US has averaged 3.2% since 1913 — while the money supply grew 6.6% a year.

IN SHORT The gap between those two numbers is where savings quietly go.

THAT IS THE WHOLE VOCABULARY

Everything from here answers one question, and you already have every word you need for it: **who controls the ledger — and what happens to everyone who doesn't?**

⚡ **SEND THIS TO A FRIEND**

Whoever gets the new money first wins. Whoever gets it last just gets the higher prices.

THE NUMBERS

Six numbers that reframe everything

All of them are in the book, sourced. None of them are estimates by us.

1,118x
more dollars
broad money, 1913 to 2022 — 6.6% a year, every year

1,060
trillion dollars
settled by one US payment system in 2022 alone

67
years of gold
already above ground, versus one year of mining

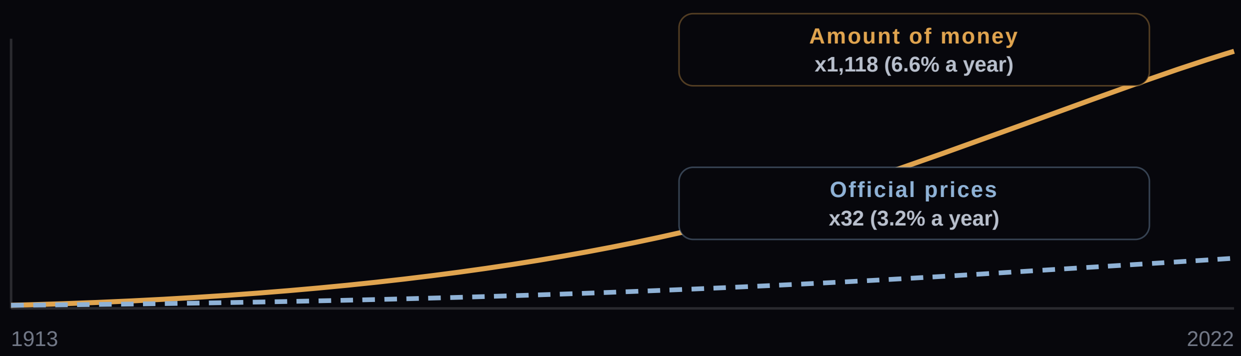
$10,000
since 1970
the US bank-reporting threshold, never once adjusted for inflation

75%
of the rescue
of America's $800bn small-business relief went to the richest fifth

17
years running
of measured decline in global political freedom, since 2005

PUT THE FIRST ONE ANOTHER WAY

The amount of money in the American banking system has grown about **6.6% a year for 109 years**. Official inflation over the same period was **3.2%**. If you held cash and did nothing wrong, you were quietly moved to the back of the queue every single year of your life.



The space between the two curves is what cash savers quietly gave up.

⚡ SEND THIS TO A FRIEND

America's financial surveillance threshold has been $10,000 since 1970. Nobody voted to lower it. Inflation did it for them.

THE READING

01 Money is a ledger, not a thing

This is the move that makes the rest of the book work.

Two schools of economists have argued for a century about where money came from. Alden says they were both describing the same object.

One camp says money emerged as a useful commodity — the most sellable good, which people converged on to escape barter. The other says money was always credit: a favour written down, older than any coin. Alden's move is to say **both are ledgers, and they differ only in who keeps them.**

A human-kept ledger is a bank, a currency, an IOU. It is efficient, flexible, and can be rewritten by whoever holds the pen. A nature-kept ledger is a gold coin or a rare shell: possession **is** the entry, and nobody can add a line by decree.

THE ISLAND THAT PROVES IT

On Yap, in the Pacific, the money was limestone discs — some over ten feet across and weighing tonnes. Nobody moved them. When a stone changed hands, the islanders simply **announced it out loud**, and everyone updated their memory of who owned what. A stone at the bottom of the sea still counted, because the ledger was the community, not the rock. **That is a database, run by voice.**

Alden's conclusion is bleak and precise: human-kept ledgers degrade, the way heat spreads out in physics. Avoiding it would take an unbroken chain of honest rulers, forever. There has never been one.

THE ROMAN RECEIPT

The silver denarius was introduced in 211 BC at over 95% silver. It was still above 95% around 64 AD. By the year 274 it was down to roughly **5%**. Nobody announced it. Each emperor just shaved a little, and the shaving compounded across two and a half centuries.

⚡ SEND THIS TO A FRIEND

Money is not a thing. It's a record. Every fight about money is really a fight about who keeps the record.

02 Every money dies the same way

Not war. Not decree. A machine.

Money is the one good where **getting better at producing it makes it worse.** The moment something is used as savings, its price carries a premium — and that premium is a standing advertisement to the whole world: come and make more of this.

So the only monies that survive are the ones nobody can make faster. Alden measures that with one ratio: **existing stock divided by yearly new production.**

Gold 67x

67 years of production already above ground

Silver 10x

Lost its monetary premium after the telegraph

Beads, wampum, tobacco under 2x

A machine arrived — and killed them

FOUR MONIES, FOUR MACHINES

West Africa: glass beads were money for centuries because local craft could not make them. Then Europeans arrived with glassworks, and traded beads for gold, goods and human beings. **New England:** wampum shell beads were money until a New Jersey mill industrialised the drilling in 1812. **Yap:** stone money held until a shipwrecked Irishman turned up with iron tools and Western boats. **Virginia:** tobacco was legal tender until everyone did the obvious thing and planted more.

AND ONE IN FAST-FORWARD

In the video game *Diablo II*, players spontaneously adopted a rare ring as currency, and even developed small change — five perfect skulls to one ring. Then someone found a duplication bug. The money died in months. **The whole history of money, re-run in a computer game.**

⚡ SEND THIS TO A FRIEND

Every money in history was killed by a technology upgrade. Gold survived because nobody could build a machine that made more of it.

THE READING

03 The telegraph broke gold

The central claim of the book. If you take one idea away, take this one.

For thousands of years, a payment and its settlement travelled at the same speed — the speed of a horse, a ship, a person. Then one of them got wings.

From the 1850s, telegraph wires linked financial centres, and in 1858 the first cable crossed the Atlantic. A payment instruction could now move in minutes. Gold still moved at the speed of a ship, and always would.

That gap was not a nuisance. It was an **opportunity**, and only one kind of institution could stand in it: a bank with offices on both ends. So gold went into vaults, and what circulated instead were paper claims on gold — because claims travel at wire speed and metal does not.

AND THEN THE CLAIMS MULTIPLIED

By 1875, British banks held coin equal to roughly **4–7% of what they owed** — and the economist reporting it was impressed rather than alarmed. Claims on gold grew far faster than gold. Full reserves became fractional reserves, banks consolidated into central banks, and in 1971 the last thread to the metal was cut.

WHY THIS EXPLAINS SO MUCH

Alden's argument is that fiat money did not win because politicians tricked anyone. **It won because it was faster**, in an age when speed was the only thing that mattered. Every problem in the rest of the book — the layers, the leverage, the crises — descends from that one mismatch.

⚡ SEND THIS TO A FRIEND

Weak money beat hard money for one reason: it could travel down a wire, and gold could not.

THE READING

04 Where money actually comes from

Almost nobody has this right, including people who work in finance.

Most people picture a government printing press. That is not where the money in your account came from. **Commercial banks create it, by lending.** When a bank grants you a loan, it does not move someone else's savings to you — it types a new deposit into existence. The loan creates the deposit.

SO WHICH PART IS ACTUALLY INFLATIONARY?

This is the bit that surprises everyone. **Quantitative easing mostly is not.** The central bank swaps assets around inside the banking system; your account does not grow. What **does** cause inflation is the combination people paid less attention to: the government spending money directly into people's accounts while the central bank buys the new debt. That is not a swap. That is new money in the hands of spenders.

Alden's numbers: broad money in the United States went from **$19.31 billion in 1913 to $21.4 trillion at the end of 2022** — 1,118 times over, compounding at 6.6% a year. Per person, that is $199 then and over $64,800 now.

⚡ **SEND THIS TO A FRIEND**

Your bank does not lend out other people's savings. It types your loan into existence. That is where most money comes from.

05 Who gets the new money first

The mechanism behind the feeling that the system is rigged.

New money never lands evenly. It enters at a point and spreads outward, and prices rise as it goes. Standing near the entry point is worth a fortune; standing far from it costs you one. Alden lays out the queue explicitly:

1. **The government**
   Borrows first, at whatever rate it likes
2. **Big banks & corporations**
   Cheap debt in good times, rescue in bad
3. **Small business & homeowners**
   Cheap credit only while things go well
4. **People on wages**
   Ask for a raise after prices have already moved

WHAT IT LOOKED LIKE IN PRACTICE

America's pandemic small-business programme spent about **$800 billion**. An economic study found it cost **$169,000 to $258,000 for every job-year it saved**, that only 23–34% of the money reached workers who would otherwise have been laid off, and that roughly **three-quarters of it ended up with the richest fifth of households.**

THE TWO-YEAR SCOREBOARD

From the start of 2020 to the start of 2022, the net worth of the bottom half of the American population rose by **$1.5 trillion**. The top 1% gained **$11.8 trillion**. Over the same stretch the money supply grew about 40%, which quietly took a slice from everyone holding cash.

⚡ SEND THIS TO A FRIEND

It is not that the rescue failed. It is that three-quarters of it went to the people who needed it least.

06 The chaos gets pushed outward

What the reserve currency does to everyone who does not issue it.

A rich country tunes its money for its own citizens. The US central bank has three official jobs, and **not one of them mentions the rest of the world** — even though it issues the money the rest of the world borrows in.

Poorer countries earn in their own currency but often owe in dollars, because nobody will lend to them in anything else. So when the dollar strengthens, their debts grow while their income does not. The volatility was not removed. It was relocated.

WHAT A DEVALUATION FEELS LIKE

In autumn 2016 Egypt cut the value of its currency by roughly **half, overnight**, to secure a $12 billion IMF loan — then halved it again in stages in 2022–23 for another one. Every worker in the country woke up needing to negotiate double their salary just to stand where they already stood.

AND THE OTHER SIDE OF THE CROWN

Alden argues issuing the world's money is also a slow poison. If everyone must hold your currency, they must get it from you — which means you must buy more than you sell, forever. That is why she thinks the US slid from over 40% of world GDP to a hollowed-out industrial base and the largest debtor position on earth.

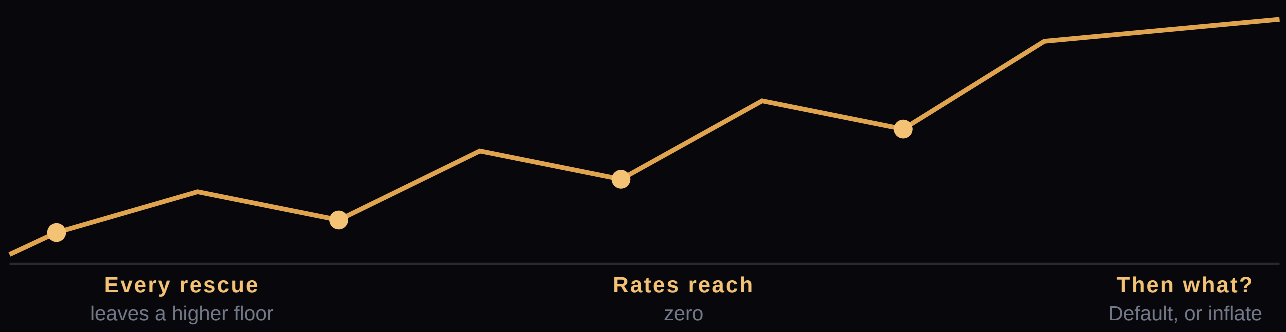
⚡ **SEND THIS TO A FRIEND**

The volatility never disappeared. It was exported to the countries with the least ability to absorb it.

07 Why she thinks this decade rhymes

The one chapter where she is openly making a forecast. Read it as such.

Ordinary credit cycles run every few years: lending expands, overshoots, contracts, and is restarted with cheaper money. But each rescue leaves more debt standing than the last. Stack enough of them and rates reach zero while the debt is enormous. At that point, she says, there are only two ways out: let the promises collapse through mass default, or expand the money to make them good. **Governments have always chosen the second.**



THE PATTERN	LAST TIME	THIS TIME
Private credit boom	The 1920s	The 2000s
The crash	1929	2008
Stagnation and populism	The 1930s	The 2010s
Conflict and deficits	The 1940s	The 2020s

SHE IS NOT PREDICTING A DATE

This is the most speculative part of the book and she says so herself. The claim is about the **shape** of the resolution, not its timing: private debt bubble pops first and looks deflationary, public debt bubble grows next and turns inflationary.

⚡ **SEND THIS TO A FRIEND**

Every rescue leaves a higher floor of debt. Do it enough times and there are only two exits, and one of them is never chosen.

SIDE BY SIDE

Gold vs fiat vs bitcoin

The book's whole scorecard on one page. Nothing here is our opinion.

THE TEST	GOLD	FIAT CURRENCY	BITCOIN
Who keeps the ledger	Nature	People	Software and machines
Can more be made cheaply	No	Yes, instantly	No, by design
Travels at wire speed	No	Yes	Yes
Settles without a middleman	Only in person	Never	Yes
Can be frozen or seized	Yes, if stored	Yes, routinely	Not if self-held
How it has failed	Locked in vaults, then confiscated	Devalued, every single time	Volatile, and still unproven at scale
What keeps it honest	Geology	A committee's restraint	Electricity and maths
Who it failed, in this book	Americans, in 1933	Lebanon, Egypt, Argentina	Anyone who bought it with borrowed money
Proven for how long	Thousands of years	About 50 years	Since 2009

THE HONEST BOTTOM ROW

Alden does not pretend the third column has won anything. Gold has thousands of years of evidence behind it and was still confiscated by the US government in 1933. Fiat has about fifty years and has devalued in every single case. Bitcoin has since 2009 — which she is careful to say is **not long enough to prove anything**.

⚡ SEND THIS TO A FRIEND

One column is kept by nature, one by people, one by machines. That single difference is the entire book.

THE VERDICT

The book, weighed

As always in this library — the book against reality. No hype.

What it is. A four-hundred-page history of money told through technology, with over four hundred citations, by an engineer-turned-analyst who is not an academic economist and does not write like one. Parts 1 to 4 are history. Parts 5 and 6 are argument about the present.

Strongest. The mechanism in section 03. Once you see that money and messages travel at different speeds, a hundred confusing things fall into place at once. The chapter on how banks actually create money is the clearest short explanation we have read anywhere.

Weakest. She holds bitcoin, and the last third is written by someone who does. To her credit she is unusually blunt about the risks — she lists government bans, software bugs, chip supply chains, quantum computing, and a full scenario in which a state kills the network cheaply. But it is still a case, not a survey. Read parts 5 and 6 knowing that.

Hardest part. It is long, and it is dense in the middle. Chapters 14 to 19 are the machinery of the modern financial system and they will cost you real attention. Alden built the book to be read out of order, and you should take her up on it.

For a crypto reader. This is the book that explains **what problem the whole field is trying to solve**. It will not tell you what to buy. It will make you much harder to lie to.

VERDICT · THE BEST MONEY EXPLAINER OF THE DECADE

IN ONE LINE

Money is a ledger. For 150 years, messages could travel faster than value could settle, and only banks and governments could stand in that gap — so they wrote the rules. Everything else follows from that.

TAKE THESE WITH YOU

Six lines worth stealing

Pick one and screenshot it. Send it to the person who will argue with you about it.

“

Gold didn't lose because it was less scarce. It lost because it couldn't travel at the speed of light.

§ THE TELEGRAPH

“

Your bank does not lend out other people's savings. It types your loan into existence.

§ WHERE MONEY COMES FROM

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Whoever gets the new money first wins. Whoever gets it last just gets the higher prices.

§ THE CANTILLON EFFECT

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Money is the one good where getting better at producing it makes it worse.

§ HOW MONIES DIE

“

The volatility never disappeared. It was exported to the countries least able to absorb it.

§ THE PERIPHERY

“

America's $10,000 surveillance threshold hasn't moved since 1970. Inflation lowered it for them.

§ PRIVACY

HOW TO EXPLAIN THIS BOOK IN ONE BREATH

“Money is just a record of who owns what. In the 1850s the telegraph made messages faster than money, and only banks could stand in that gap — so they ended up writing the rules for everyone. **The book is about what that cost, and who paid it.**”

WHAT TO READ NEXT

If this landed, these are next

Free in our library at panopticprotocol.com — same treatment, same rules.

The Sovereign Individual
Written in 1997, it predicted almost exactly this. We graded every prediction against 2026.

Proof of Stake — Vitalik Buterin
Alden argues proof-of-stake cannot carry global money. Here is the other side, from the person who built it.

Honeybee Democracy
Alden asks who keeps the ledger. This one asks how a crowd with no leader agrees on anything at all.

The Psychology of Money — Morgan Housel
Section 05 is about who gets the money first. This is the book about what people then do with it.

Skin in the Game — Nassim Taleb
Who pays when the decision is wrong? Read it straight after section 05 and it lands twice as hard.

Freedom of Money
The other side of the argument, from inside the industry. We graded that one too.

Source. Lyn Alden, *Broken Money: Why Our Financial System is Failing Us and How We Can Make it Better*, Timestamp Press, 2023. Every figure, date and case in this guide comes from that book. This is commentary and analysis by PanopticProtocol — not a summary, and not a substitute for reading it.

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panopticprotocol.com — t.me/PanopticProto

⚡ SEND THIS TO A FRIEND

This guide is free. If it taught you one thing, send it to someone who still thinks the government prints the money.