A PANOPTICPROTOCOL COMMENTARY

Manias, Panics, and Crashes

Four hundred years of the same cycle. Your first one was probably 2021.

COMMENTARY | NOT A SUMMARY | FOR CRYPTO READERS

Kindleberger wrote the natural history of financial crises in 1978. The whole book turns on one question lenders forget to ask: "Where will the borrowers get the cash to pay us the interest if we stop providing them with the cash in the form of new loans?"

Every crypto yield paid out of the next deposit — Anchor's 19.45%, Celsius's 17%, FTX — failed on that question. This guide lays 2020–23 over the book, phase by phase.

10
big bubbles
the book's list, from Dutch tulips in 1636 to housing in 2007

4
waves of banking crises
in thirty years — more than any period before

20–30%
a year
how fast debt grows in a bubble, by the book's definition

ONE CYCLE, FOUR HUNDRED YEARS

Displacement → credit → euphoria → distress → panic. The words change, the structure abides.

Displacement	Credit	Euphoria	Distress	Panic
the halving, "DeFi summer"	stablecoins ×5, 100x perps	the arena, the Super Bowl	"withdrawals are paused"	FTX, one week

Read the book. *Manias, Panics, and Crashes: A History of Financial Crises*, Charles P. Kindleberger and Robert Z. Aliber, seventh edition, 2015. Every episode and figure here is theirs; the crypto twins are ours.

START HERE

The whole book in 60 seconds

If you read one page, read this one. The rest is the record.

Four hundred years of crises, laid out side by side to see what they share. They share a shape. A shock opens a profit — a war ends, a railway is built, rules are loosened. Credit expands to chase it. Prices outrun incomes. Money starts to feel free. Then a pause, a scramble for cash, and a crash. **"Details proliferate; structure abides."**

The book's sharpest tool is a definition: **"a bubble is an increase in indebtedness of a group of borrowers at a rate of 20 or 30 percent a year for two, three, or more years."** Not a feeling. A rate. And its sharpest test is a question: where does the interest come from if the new loans stop?

WHY THIS BOOK, FOR CRYPTO

Crypto has run the same cycle three times in twelve years, the last time on credit, and called it new each time. The book does not care what the object is — tulip bulbs, canal shares, Tokyo land, subprime mortgages. It explains why the yield had to come from somewhere, why warnings fail, why the fraud surfaces after the fall, and what a lender of last resort is for.

THE COLOUR RULE

Yellow is the book and the record. Green is the crypto twin. When a page shows both, it is because the **same mechanism** is running — not a loose comparison. Where the bridge is weak, the guide says so.

⚡ SEND THIS TO A FRIEND

Kindleberger in one line: a bubble is debt growing 20–30% a year, and it ends the day lenders ask where the interest comes from without new loans.

NO JARGON

Six words from the book

The vocabulary is two hundred years old, and every word has a date on a crypto chart.

Displacement

"An outside event or shock that changes horizons, expectations, anticipated profit opportunities, behavior."

IN PLAIN TERMS The halving, the ETF, "DeFi summer", a 20% yield on a stablecoin.

Overtrading

Adam Smith's word for the euphoric stage: buying to resell, not to hold, with "excessive leverage".

IN PLAIN TERMS Trading the chart, not the protocol; 100x on a perp.

Ponzi finance

Income cannot cover even the interest, so the interest is paid from new borrowing. Named after a Boston deposit firm of 1920.

IN PLAIN TERMS A yield paid from the reserve, the treasury, or the next depositor.

Distress

The stretch after prices stop rising and before the panic. "The essence of financial distress is loss of confidence."

IN PLAIN TERMS "Withdrawals are temporarily paused."

Revulsion and discredit

The old words for the turn: everyone runs from assets to cash, and lenders stop lending against anything that is falling.

IN PLAIN TERMS The run on an exchange; a token no desk will lend against.

Lender of last resort

Bagehot's rule, 1873: in a panic the central bank lends freely, at a penalty rate, to solvent firms on good collateral.

IN PLAIN TERMS Nobody. In June 2022 the role was played by FTX.

⚡ SEND THIS TO A FRIEND

Displacement, overtrading, Ponzi finance, distress, revulsion, lender of last resort: six words from a book about tulips, each with a date in 2022.

NO JARGON

…and six from the chain

Each one tied to a page of the book, so the green pages read as easily as the yellow ones.

Stablecoin

A token pegged to the dollar, backed by reserves or by an algorithm. Supply grew from $27bn to $150bn in 2021.

IN PLAIN TERMS The book's money substitute: a new instrument that expands credit outside the old limits.

Yield farming

Depositing tokens for a return paid in a token or out of a reserve. In 2020–21 the advertised rates ran from 20% to 1,000%.

IN PLAIN TERMS Minsky's Ponzi rung whenever the yield exceeds what the protocol earns.

Lending desk

Celsius, BlockFi, Voyager, Genesis: firms that took deposits at high rates and lent them on, often unsecured.

IN PLAIN TERMS The book's chain of bills: one default and the chain unravels.

De-peg

A stablecoin trading below a dollar. UST fell to ten cents in May 2022; USDC touched about 87 cents in March 2023.

IN PLAIN TERMS A currency crisis; the book says nine in ten banking crises come with one.

Contagion

Terra in May 2022, Three Arrows and Celsius in June, Voyager in July, FTX in November, two US banks by March.

IN PLAIN TERMS The book's 1857: an Ohio bank fails in August, Hamburg needs a train of silver in December.

Bailout

One firm lending to another so it can meet withdrawals. In June 2022 FTX and Alameda did exactly that, twice.

IN PLAIN TERMS The lender of last resort, played by a leveraged firm five months before it failed itself.

⚡ SEND THIS TO A FRIEND

A stablecoin is a money substitute, a yield farm is Ponzi finance, a lending desk is a chain of bills, a de-peg is a currency crisis. The book names them all.

THE NUMBERS

Six numbers from the book

The authors argue with episodes, and the episodes come with numbers. These are the ones to carry.

20–30%
a year
debt growth that defines a bubble; "virtually every banking crisis" followed it

90%
of banking crises
since the 1970s came with a currency crisis, and the reverse too

30 to 1
leverage
Lehman before it failed; LTCM: $125bn on $5bn of capital

$100bn
in post-dated cheques
on Kuwait's exchange in 1982, "much more than the country's GDP"

9×
Icelandic stocks
2002–07; then −90%, and the krona −50%

2
manias in US stocks
in two hundred years, by the book's count; crypto: three in twelve

THE ONE TO REMEMBER

Mexico and ten other countries borrowed through the 1970s. Loans grew 30% a year on interest of about 8%, so paying it cost the borrowers nothing they could feel; a New York banker said "countries don't go bankrupt." In October 1979 the Fed tightened, the new loans stopped, and the defaults cost the lenders $250 billion.

IN CRYPTO: THE SAME ARITHMETIC

Anchor's 19.45% was paid from a reserve that Terraform Labs and LFG kept topping up. Celsius paid up to 17% and at bankruptcy owed users $4.7 billion against $167 million of cash. Both paid on time, for years, because deposits kept coming — exactly as Mexico did. The test is whether a yield could be paid **with inflows at zero**.

⚡ SEND THIS TO A FRIEND

Kindleberger: Mexico paid its interest perfectly for ten years, from the next loan. Anchor paid 19.45% for fourteen months, from the reserve. Same ending.

THE READING

The anatomy of a crisis

Chapter 2, with the bicycle from chapter 1. The Minsky model and the three kinds of finance.

A shock improves the outlook in one corner of the economy. Firms borrow to chase it, and **"the expansion in the supply of credit fuels the boom."** Optimism feeds itself, and every boom gets a slogan: "Japan as Number One", "The East Asian Miracle". Then the sorting that makes the book useful. **Hedge** finance: income covers interest and principal. **Speculative**: it covers the interest only. **Ponzi**: the interest itself has to be borrowed. When growth slows, firms slide down that ladder — and there is no soft landing. Prices "begin to decline immediately after they stop increasing — there is no plateau, no 'middle ground'."

THE MINSKY MODEL: ONE LINE, SIX PHASES

"There is no plateau, no 'middle ground'." The bicycle that stops moving forward falls over.

IN CRYPTO: THE LADDER, RUNG BY RUNG

Hedge finance exists on-chain: a protocol whose fees cover what it pays out. Speculative finance is the token whose emissions cover the yield only while the price holds. Ponzi finance is the yield paid from a reserve, a treasury or the next depositor — Anchor, Celsius, and FTX, where customer deposits covered Alameda's losses.

⚡ SEND THIS TO A FRIEND

Minsky, via Kindleberger: hedge finance pays debt from income, speculative pays only the interest, Ponzi pays the interest from new loans. Sort your yields.

THE READING

Insiders, outsiders, and Newton

Chapter 3. Two stages of speculation, and the smartest man in England buying the top.

Speculation "often develops in two stages." First a sober one, where people respond to a real change. Then a second, where the point is no longer the thing but the price of it. The 1830s railway boom sold its first shares to "men of substance" who expected the line to bring them business; a few years later the buyers were "ladies and clergymen", brought in by promoters "interested only in quick profits". Two stages mean two groups: **"The insiders destabilize by driving the price up and then at or near the top sell to the outsiders, whose losses are necessarily equal to the gains of the insiders."**

TWO STAGES OF SPECULATION

- **Stage one — sober**
  "men of substance", 5–10% down, business from the line
- **Stage two — the objective becomes the process**
  "rogues interested only in quick profits"; ladies and clergymen
- **Insiders sell to outsiders**
  losses "necessarily equal to the gains of the insiders"

NEWTON, 1720

Spring 1720
"not the madness of people"

20 April
sells: £7,000, a 100% profit

Summer
buys back near the top: −£20,000

"There is nothing as disturbing to one's wellbeing and judgment as to see a friend get rich." Unless it is to see a non-friend get richer.

IN CRYPTO: THE UNLOCK IS THE SECOND STAGE

The sober stage was real: developers and early users. The second arrived as unlocks, presales at a hundredth of the listing price, and influencers paid in the token they promoted. Retail is the outsider by construction: it can only buy from someone who bought earlier and cheaper. Keep Newton in mind — he sold in April 1720 with a 100% profit, watched friends get richer, bought back near the top, and lost £20,000.

⚡ SEND THIS TO A FRIEND

Kindleberger: insiders drive the price up and sell to outsiders at the top; losses equal gains by arithmetic. The unlock schedule is that trade with a calendar.

THE READING

Fueling the flames

Chapter 4. Every mania needs credit, and money always finds a substitute for itself.

"You can't have a real estate bubble without the rapid growth of the supply of credit." But credit is not only banks. The tulip buyers of 1636 bought on account from the seller. Dutch merchants of 1763 passed chains of bills. French speculators of 1882 put 10% down and borrowed the rest. In Kuwait, shares and land were bought with post-dated cheques until the paper in circulation was worth close to $100 billion — "much more than the country's GDP." In July 1982 the cheques started to bounce. Fix any definition of money, and the next boom invents a new one.

THE SUBSTITUTES FOR MONEY: 400 YEARS OF GETTING AROUND THE LIMIT

1636	1763	1882	1929	1982	2007	2021	2022
vendor credit	**chains of bills**	**call money**	**call money**	**post-dated cheques**	**MBS, CDO**	**stablecoins**	**FTT as collateral**
tulips: four cows down	DeNeufville fails	10% down, 90% borrowed	$8.5bn, Oct. 1929	Kuwait: ~$100bn > GDP	securities ×2 per layer	$27bn → $150bn	40% of Alameda

"The history of money is a story of continuing innovations… substitutes for money that circumvent the regulatory requirements."

IN CRYPTO: THE SOUK AL-MANAKH WITH A TICKER

The 2021 expansion had three substitutes. Stablecoins, $27 billion to $150 billion in twelve months, were the new money. Lending desks that took deposits at 8–17% and lent them on unsecured were the chain of bills. And FTT was the post-dated cheque: 40% of Alameda's balance sheet was its own exchange's token, pledged for real dollars.

⚡ SEND THIS TO A FRIEND

Kindleberger: no bubble without credit, and money always breeds a substitute the rules do not count — bills, call money, post-dated cheques. In 2021: stablecoins and FTT.

THE READING

The critical stage

Chapter 5, with chapter 1's numbers. Why warnings fail, and what actually pricks a bubble.

In December 1996 Greenspan called the market "irrationally exuberant" with the Dow at 6,600. It went on to 11,700. Warburg warned in February 1929; prices paused, then rose again. The book is blunt about why: nobody stops buying because an official is worried, "when the prices of securities and assets have been increasing at annual rates of 20 to 30 percent a year." What ends a mania is a pin, and the pin can be almost anything — "a bankruptcy, a suicide, a flight, a revelation of fraud." In Japan it was a new central-bank governor capping property loans. Something else would have done it.

WARNINGS DO NOT WORK		THE PIN	
Warburg, Feb. 1929 prices "too high", like 1907	crash eight months later	**Japan, Dec. 1989** the new BoJ governor caps real-estate loans	crash from January 1990
Greenspan, 6 Dec. 1996 "irrational exuberance", Dow 6,600	Dow 11,700; NASDAQ 1,300 → 5,000+	**US, 2000** the Fed withdraws the Y2K liquidity	NASDAQ −80% by 2003
FCA, 11 Jan. 2021 "be prepared to lose all their money"	BTC ~$35,000 → ~$69,000 by November	**Fed, 16 March 2022** the first rate rise since 2018	Terra breaks 9 May; FTX in November

"The nature of every bubble is that eventually it will be pricked and then, as with a child's balloon, it will deflate suddenly."

IN CRYPTO: THE PIN WAS THE RATE

The warnings came on schedule: in January 2021 the FCA told consumers to "be prepared to lose all their money", and bitcoin doubled by November. The pin was Japan's, the end of free credit. The Fed's first rise since 2018 came on 16 March 2022; Terra broke eight weeks later. The book's **date of no return** applies too: cut off in 2021, Celsius or FTX would have failed sooner and smaller.

⚡ SEND THIS TO A FRIEND

Kindleberger: warnings do not stop manias; Greenspan warned at Dow 6,600 and it went to 11,700. The pin is the end of easy credit. Fed hike, 16 March 2022; Terra, 9 May.

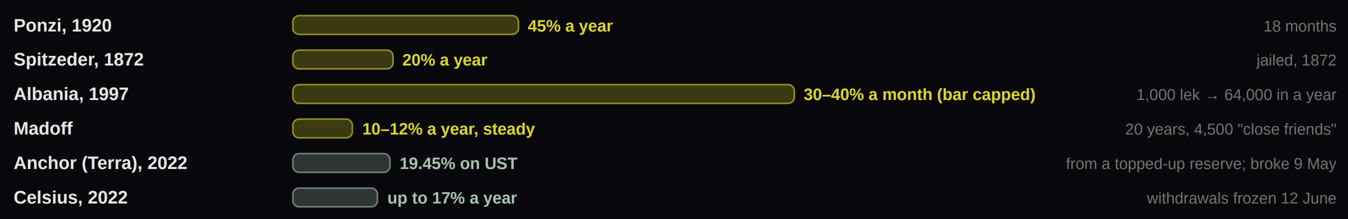
THE READING

Frauds, swindles, and the credit cycle

Chapter 7. Ponzi, Madoff, Nick Leeson, and why the fraud is always found after the fall.

"Sharp declines in the prices of securities always lead to the discovery of fraud and swindles." Not because fraud starts in the bust. It grows with the boom, "much like the supply of credit", and stays hidden while borrowers can still refinance. When credit tightens, it "sprouts from the corporate edifice like mushrooms under the logs in a soggy forest." Ponzi promised 45% a year and lasted eighteen months. Madoff promised 10 to 12%, steady, and lasted twenty years. "Every Ponzi scheme has a 'story'." And Nick Leeson simply doubled his bet after every loss, until the losses were the size of the bank.

WHAT WAS PROMISED, AND FOR HOW LONG



"Every Ponzi scheme has a 'story'." Postal coupons, a split-strike strategy, an "algorithmic" dollar. "The demand for free lunches never ends."

IN CRYPTO: THE MUSHROOMS OF NOVEMBER

FTX was not found by an audit. It was found when a leaked balance sheet showed that 40% of Alameda's $14.6 billion of assets was FTT, its own exchange's token, and a rival said it would sell $529 million of it. Six billion dollars left in three days; the $8 billion hole was disclosed on the ninth, the bankruptcy came on the eleventh. The story, the timing, the doubling-down: all of it is in the chapter.

⚡ SEND THIS TO A FRIEND

Kindleberger: fraud grows with the boom and is discovered in the bust, "like mushrooms under the logs in a soggy forest." Nobody caught FTX. The price falling did.

THE READING

Contagion

Chapters 8 and 9. From an Ohio bank to Hamburg in 1857, and why four waves were not a coincidence.

In 1857 **"the dominoes started their collapse in Ohio — or, rather, the New York branch of an Ohio bank"** — and fell across six American states, then in Liverpool, London, Paris, Hamburg, Oslo and Stockholm. 1,415 American banks failed in October. London suspended the Bank Act in November. In December Hamburg was saved by a train of Austrian silver. "The world is a unit; industry and trade have made it so." The links are trade, cross-border money and mood — and "as the changes in stock prices become larger, the correlations become stronger."

CONTAGION: TWO CHAINS

"The world is a unit; industry and trade have made it so." Elberfeld chamber of commerce, 1857. In crypto the link is the lending desk.

IN CRYPTO: THE DOMINOES HAD NAMES

The 2022 chain ran through lenders, not countries. Terra lost $45 billion in the week of 9 May. Three Arrows, holding $200 million of Luna, was in liquidation by 27 June, defaulting on more than $665 million owed to Voyager. Celsius froze on 12 June, Voyager filed on 5 July, FTX failed on 11 November, Genesis froze five days later. Every link was a loan that assumed the next one would be repaid.

⚡ **SEND THIS TO A FRIEND**

Kindleberger: an Ohio bank failed in August 1857 and Hamburg needed a train of silver by December. A stablecoin broke in May 2022; two banks died by March.

THE READING

The lender of last resort

Chapters 11, 12 and 14. Bagehot's rule, the panic playbook, and the crash the book calls avoidable.

Bagehot's rule: in a panic, lend freely, at a penalty rate, to solvent firms with good collateral. Before there was anyone to do that, there was a playbook. Stalling — in 1745 the Bank of England "paid them slowly in sixpence coins". Bank holidays, in 1873 and 1933. Guarantees: a fund of £17 million for Barings in 1890. The catch is moral hazard: **"A 'free lunch' for the speculators today means that they are likely to be less prudent in the future."** The book's answer is a trick — "eventually always come to the rescue… but always leave it uncertain whether rescue will arrive in time or at all."

THE PANIC PLAYBOOK	WHO PLAYED IT IN CRYPTO
Stalling 1745: the Bank of England pays out its notes slowly, in sixpences	"withdrawals are temporarily paused": Celsius, 12 June 2022
Holiday 1933: a bank holiday; 1873: the exchange closes	"maintenance" on the exchange; Terra halts its chain, 13 May
Guarantee 1890: a £17 million fund for Barings	SAFU; LFG's 80,394 BTC, spent in days
Lender of last resort Bagehot: freely, at a penalty rate, to the solvent	FTX, June 2022: $250m to BlockFi, $200m + 15,000 BTC to Voyager — then it failed

"'Too little, and too late' is one of the saddest phrases in the lexicon of central banking." Crypto does not have the lexicon.

IN CRYPTO: BAGEHOT WITHOUT A BANK

Crypto ran the playbook without the institution. Stalling became "withdrawals are temporarily paused". The bank holiday became a halted chain. The guarantee became 80,394 bitcoin that Terra spent in days. The lender of last resort was FTX, which in June 2022 lent $250 million to BlockFi and, through Alameda, $200 million plus 15,000 bitcoin to Voyager. Five months later the lender was the panic.

⚡ **SEND THIS TO A FRIEND**

Bagehot: in a panic, lend freely at a penalty rate to the solvent. Crypto's lender of last resort in June 2022 was FTX. By November it was the panic.

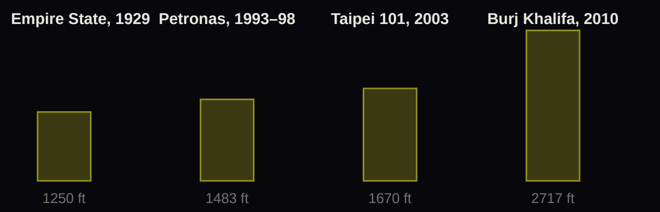
THE READING

Euphoria and paper wealth

Chapter 6 and the Japan pages. The tallest building, the $90 million Van Gogh, gold leaf on dessert.

"The Empire State Building in New York City — 1250 feet tall — was started in 1929, at the peak of a bubble." Petronas went up before the Asian crisis; Burj Khalifa opened sixteen months after Lehman. Tall buildings are "a visual manifestation of asset price bubbles", a "'mine is bigger' syndrome". The mechanism is paper wealth: prices rise, households feel richer, they spend, prices rise again. Japan is the specimen. An entrepreneur "paid nearly $90 million for The Portrait of Dr Gachet" — "The money was there, and probably borrowed money." Afterwards, "There was no way to recover the gold leaf that had been sprinkled on desserts."

THE SKYSCRAPER INDEX



A "mine is bigger" syndrome. "Tall buildings are as economic as the Pyramids in Egypt."

CRYPTO'S MONUMENTS, 2021–22

11 March 2021 Beeple, $69.3m at Christie's	8 months before the top
17 November 2021 Crypto.com Arena: $700m, 20 years	7 days after the ATH
13 February 2022 Super Bowl: FTX, Coinbase, Crypto.com, eToro	3 months after; Terra in 12 weeks

"The money was there, and probably borrowed money." Japan, 1990. The same, 2021.

IN CRYPTO: THE ARENA WAS THE TOWER

Crypto's tallest building was a naming deal. On 17 November 2021, seven days after bitcoin's all-time high, Crypto.com paid $700 million over twenty years to rename the Los Angeles arena — the largest such deal ever signed. Three months later four exchanges bought Super Bowl advertising; Terra broke twelve weeks after the game. The test for euphoria is not price but **squandering**.

⚡ SEND THIS TO A FRIEND

Kindleberger: the Empire State broke ground at the 1929 peak; Japan bought a $90m Van Gogh in 1990. Crypto renamed an arena for $700m a week after the top.

SIDE BY SIDE

The book, and its twin

Eight phases. Yellow is the record, green is where you met it on a screen in 2021–22.

KINDLEBERGER	THE RECORD	ON-CHAIN
Displacement	Canals, railways, deregulation, MBS	DeFi summer; the halving; a 20% yield
Credit expansion	Bills, call money, Kuwait's cheques	Stablecoins ×5; lending desks; FTT
Euphoria	The Empire State, Dr Gachet, gold leaf	The arena, the Super Bowl, Beeple
Overtrading	Insiders sell to outsiders at the top	Unlocks; presales; influencers
Distress	Warnings fail; the pin is credit	Fed hike, March 2022; Terra, May
Revulsion	The rush from assets to cash	Celsius freezes; 3AC; Voyager
Panic and crash	Lehman, an avoidable one	FTX: $6bn out in three days
Lender of last resort	Bagehot; the Silberzug; TARP	FTX in June; nobody in November

AND ONE WHERE THE BRIDGE IS WEAK

The book's crises are national, and they travel between countries. Crypto has no borders and no central bank, so two things differ. The pin was imported — the end of easy credit came from the Federal Reserve, not from inside the market. And there is nobody at the bottom of the chain: almost every crisis in the book ends with a rescue, and crypto's ended in a bankruptcy court.

⚡ SEND THIS TO A FRIEND

Eight phases, eight dates on a 2021–22 chart — and one difference: almost every crisis in the book ends with a lender of last resort. Crypto's end in bankruptcy court.

THE VERDICT

The book, weighed

Where it holds, where it strains, and where a crypto reader should push back.

What holds. The shape. The Minsky ladder, the bubble as a rate of debt growth, the lenders' question, fraud that grows with the boom, contagion along loans, the case for a rescuer — all of it was tested on a market the authors barely knew existed, and all of it fits, with dates.

What strains. The 2015 box on bitcoin calls it "more of a con than a coin or a money" and works from a made-up cap of one million; the real cap is twenty-one million, and it survived the cycle the book describes. Some forecasts aged badly: the introduction asks "when Greece will leave" the euro. It did not.

Where to push back. "Manias are dramatic but they have been infrequent; only two have occurred in US stocks in two hundred years." Crypto has had three in twelve. The book's own logic explains why: no lender of last resort, leverage around the clock, and a money substitute that can grow five-fold in a year. Read it as a field guide, not as history.

WHERE IT HOLDS

- The Minsky model → every crypto cycle, with dates
- The lenders' question → Anchor, Celsius, FTX
- Fraud is pro-cyclical → FTX was "discovered" when prices fell
- Contagion travels through lenders → 3AC, Voyager, Genesis

WHERE IT STRAINS

- The bitcoin box (2015): "more of a con than a coin", a hypothetical "1 million"
- The 2015 question "when Greece will leave" the euro; it did not
- The cross-border-flows thesis is Aliber's, not Kindleberger's

IN ONE LINE

A field guide, not a forecast. It cannot say when the pin arrives — the timing "could not have been predicted" — but it tells you which stage you are in, and that stages run one way.

TAKE THESE WITH YOU

Six lines worth stealing

In the authors' words. And one sentence to explain the whole book.

“

Where will the borrowers get the cash to pay us the interest if we stop providing them with the cash in the form of new loans?

INTRODUCTION. THE QUESTION EVERY YIELD MUST ANSWER.

“

Details proliferate; structure abides.

CHAPTER 2. ON THE CLAIM THAT EVERY CRISIS IS UNIQUE.

“

There is no plateau, no 'middle ground'.

CHAPTER 1. PRICES THAT STOP RISING START FALLING.

“

Sharp declines in the prices of securities always lead to the discovery of fraud and swindles.

CHAPTER 7. FTX, NOVEMBER 2022.

“

The demand for free lunches never ends. And the supply of chumps is endless.

CHAPTER 14. ON THE BUYERS OF AAA-RATED CDOS, AND ON ANCHOR.

“

'Too little, and too late' is one of the saddest phrases in the lexicon of central banking.

CHAPTER 12. THE LENDER OF LAST RESORT.

HOW TO EXPLAIN THIS BOOK IN ONE BREATH

A shock opens a profit, credit chases it, prices outrun incomes, money starts to feel free — and then the lenders ask where the interest will come from without new loans. Nobody has an answer, and everything paid from the next deposit stops at once. The authors watched it in tulips, canals, land and houses. You watched it in a stablecoin.

WHAT TO READ NEXT

If this one landed, these are next

Three guides in the library that pick up where Kindleberger stops.

Broken Money — Lyn Alden
The money substitutes from the other side: why every ledger, from bills of exchange to the eurodollar, loosened the limit.

Thinking, Fast and Slow — Daniel Kahneman
The psychology under "irrational exuberance", measured in a laboratory: the anchor, the loss that counts double, the friend who got rich.

Skin in the Game — Nassim Taleb
The moral-hazard chapter, sharpened: what happens when the people taking the risk are not the people carrying the loss.

Read them in that order. Alden for what money is and why it keeps breeding substitutes, Kahneman for why the second stage of speculation feels rational from the inside, Taleb for the bailout question the book leaves open.

⚡ SEND THIS TO A FRIEND

Just read the four-hundred-year history of bubbles to understand 2022, and it was all there: the yield from the next deposit, the fraud after the fall, no lender of last resort.