Chapter Two

"DEMOCRATIZING FINANCE"

I told you at the beginning of this book that I'm writing about what makes me angry – and if you're here to watch me get mad, buckle up. No fintech claim makes me angrier (or gets more airtime) than its promise to "democratize finance." This promise of democratized borrowing and investment opportunities is sometimes served up with a side order of revenge: "switch to our products, and you can stick it to Wall Street!" But more often than not, fintech companies are working with Wall Street rather than disrupting it, and the financial inclusion on offer can range from ineffectual to downright predatory.

Many fintech customers already have access to more traditional financial services: by switching, they often forfeit consumer protections without realizing it. For those who have been newly recruited into investing and borrowing through fintech, their inclusion is often more accurately described as "predatory inclusion" or "democratizing exploitation." If fintech's version of financial inclusion is helping people to wager money they can't afford to lose, and borrow money they can't afford to pay back, then that's a pretty grim vision for the future.

Let me elaborate…

Gambling for resurrection

Back in 1992, Bill Clinton's winning presidential campaign message was "it's the economy, stupid." Now, even in a good economy, huge numbers of Americans struggle financially. A more fitting message today would be, "it's the economic precarity, stupid."

Home ownership and the rest of the American dream seem out of reach for many people, and there's very little safety net available when it comes to healthcare expenses, retirement, or just bad luck. Obviously, this economic precarity doesn't affect everyone equally, and the lucky few aren't precarious at all. The United States has some of the highest levels of income inequality in the developed world: in 2022, the average so-called "1%" family had 71 times as much wealth as the average middle-class family (in 1963, they only had 36 times as much). But many Americans at the other end of the wealth distribution are struggling.

According to one 2024 report from Bank of America, nearly half of all surveyed American households self-reported that they were living paycheck-to-paycheck. The report authors also developed their own metric of precarity – "spending 95% or more of their household income on necessary day-to-day expenses" – and found that only one quarter of the households examined by the report authors satisfied that definition. Frankly, if even one quarter of a wealthy country like the United States is just barely getting by, then that should be considered a massive policy failure. But other research backs up the much larger group of surveyed households who reported feeling precarious: a report that crunched census data and MIT's Living Wage calculator found that only 56% of full-time workers in the United States were making a living wage.

That means that just working your butt off isn't enough – once more for emphasis, nearly half of *full-time* workers aren't making a living wage. And the money coming in is only half of the equation. Shit happens, and the safety nets that used to help Americans cope with job losses, retirement, and health problems are much harder to access than they used to be (particularly for those working in the gig economy – another gift from Silicon Valley – who can't take advantage of employer-sponsored healthcare or retirement plans because they're not technically employees). The specter of medical debt is particularly terrifying. The results of one survey suggested that 20 million American adults owed $220 billion in medical debt, and medical expenses are widely understood to be the leading cause of personal bankruptcies in the United States. And the situation will only get worse now that Republicans in Congress have passed their "Big Beautiful Bill." That bill is projected to cause nearly 12 million people to lose their health insurance, and Yale's Budget Lab also projects that the combined impact of the bill and tariff increases will reduce incomes for the bottom 80 percent of U.S. households.

While economic precarity is pervasive in America, it's demonstrably worse for some groups than others. Black and Hispanic workers, for example, are nearly twice as likely as white workers not to earn a living wage, and in 2022, the average white family had six times the wealth of the average Black or Hispanic family (if you go back to the 1990s, the multiplier was closer to four times, so racial wealth inequality has been widening). As several excellent books have explained, the root of these disparities lies in historical patterns, policies, and practices that benefitted some groups and systematically excluded others. For a sense of how far back this goes, one report established that the economic status of many Black Americans is *still* influenced by whether their families were enslaved until the end of the Civil War and exposed to Jim Crow oppression as a result.

And so economic precarity is a structural problem that can't simply be pinned on individuals' choices. Wages have been shrinking due to forces beyond workers' control, and safety nets have been drying up. Policymakers seeking a solution to this increasingly pervasive economic precarity have often supported making loans and investment opportunities more readily available to those who are struggling. Unfortunately, many of these "financial inclusion" policies are simply band-aids – and the rise of fintech has encouraged financial inclusion policies that are even more superficial and simplistic. This is the "when all you have is a hammer, everything looks like a nail" perspective. If apps are all we have to solve economic precarity, then we will consider the problem solved if there are more fintech apps that allow more people to access more financial services from more fintech providers. But what is the *real* problem that needs solving here? Let's dig deeper, and ask why we want to expand financial inclusion in the first place.

Access to financial services is a means, not an end, and so "democratizing finance" is good policy if it allows people to participate more fully in the economy and improves their economic well-being by affording them opportunities to build wealth and manage risks. But the opposite is also true. Expanding access to financial services is bad policy if it undermines economic well-being – for example, if the financial services on offer are more like gambling, or leave users mired in inescapable debt. If what we really want is for financial services to be provided widely *and* fairly, that may simply not be a profitable business model for a fintech company.

Let me put it more bluntly: we are kidding ourselves if we expect the private sector to solve the long-standing and structural problem of economic precarity, and we shouldn't be surprised when businesses seek to profit from that economic precarity instead – that's capitalism, baby! But some fintech businesses do claim to be so much more than profit-making enterprises, and then trade on those claims to try and curry regulatory favor and concessions that aren't available to other financial businesses. Regulation is needed to prevent predatory inclusion, but many fintech business models have obscured or explained away their high costs and problematic practices with a veneer of flashy tech innovation. And when regulators *have* sought to enforce their rules against fintechs, they have often been accused of being "anti-innovation."

As we'll see as we dissect fintech business models, technology is sometimes most useful as a smokescreen to hide the *real* innovation – which is finding a way around the rules that apply to other financial service providers. As former Director of the Consumer Financial Protection Bureau Rohit Chopra once put it, this kind of innovation is value creation by the lawyers, not the technologists. Our society reveres technological innovators too much, but we certainly don't have that problem when it comes to corporate lawyers (one of Shakespeare's most quoted lines is "The first thing we do, let's kill all the lawyers"). Maybe it will be easier for us to be skeptical of fintech's promises once we understand that, in many ways, it's the corporate lawyers who are driving the "democratization" of finance. And maybe once the public has realized that fintech won't save us, elected officials might finally be pressured into doing something about the status quo. Because, when it comes to economic well-being in the United States, that status quo is pretty grim. It's not surprising that so many people are looking for a Hail Mary.

In 2021, I spent a lot of time riding Amtrak. Every time I arrived at a train station, the billboards all seemed to be promoting one of two things: crypto, or sports betting apps. I was therefore intrigued when I came across an article in *The Atlantic* in November 2021 titled "America's Gambling Addiction is Metastasizing." The article talked about the ubiquity of gambling in the smartphone era – "once there was Las Vegas; now there's a Las Vegas in every phone" – but it also concluded with the assertion that "the citizens of the United States have accepted their radical precariousness as a way of life. The rise of the gambling industry is just a symptom of our acceptance." What a depressing – but probably accurate – conclusion. Even for those who wouldn't otherwise be tempted to gamble much, financial precarity can make risky betting seem like a rational thing to do with any spare money you *do* have (or, more dangerously, with money you've borrowed and need to pay back win or lose). If you are just one medical bill away from financial ruin, then small investments in staid assets that yield moderate returns over a long-term period simply won't cut it.

This kind of precarity doesn't just boost sports betting. It also creates an environment ripe for the launch of an app that makes it very easy to make all-or-nothing bets on stock price movements, or for the launch of an exchange where people can choose from a seemingly limitless supply of crypto assets to wager that their "number [might] go up." This kind of baseline economic precarity can also be exploited to convince legislators, regulators, and judges to stay out of the way of such apps and exchanges, because do they reeeally want to stop a cool new tech business that just might provide someone, somewhere with a financial lifeline?

The problem with embracing this kind of gambling-for-resurrection as economic policy is that for every person who benefits from the financial lifeline, many more will lose out big. As Representative Sean Casten pointed out at a Congressional hearing "There is an innate tension …between democratizing finance…and being a conduit to feed fish to sharks." Gambling is a zero-sum game and as we all know, the house tends to win (if it doesn't, it won't survive). Technology doesn't change those odds – and why would fintech firms want to? They are increasingly playing the lucrative role of the house, although they typically don't advertise themselves as casinos. Many fintech firms instead claims to be facilitating *investment* – something eminently more empowering and respectable than gambling (not to mention something that is regulated very differently).

To be fair, the line between investing and gambling has been blurring for decades, and the traditional financial industry bears a lot of responsibility for that. The law has also contributed to that blurring, and things could get worse if we go about regulating new kinds of "investments" in the wrong way. For example, a UK parliamentary committee raised the important concern that regulating crypto investments as a "financial service" could "create a 'halo' effect that leads consumers to believe that this activity is safer than it is, or protected when it is not." Their proposed solution? Regulate crypto speculation as gambling, not investing.

Sadly, no one listened to them, but their proposal makes a lot of sense. True investing is supposed to be for the socially useful purpose of raising capital for productive activities, where there's a possibility of a win-win outcome for both the investor and the business using the investor's capital. The more that "investment opportunities" resemble zero-sum gambling, the more likely it is that the big fish investors and market intermediaries will benefit at the expense of the little guys. In these kinds of situations, "democratizing" is tantamount to throwing the little fish to the sharks.

Stealing ~~from~~ for the rich

Of course, the stories of the rare occasions where the little guys do win are so very compelling. As journalist Spencer Jakab explains in his book *The Revolution that Wasn't: GameStop, Reddit, and the Fleecing of Small Investors*, that's why "lights and sirens go off when someone hits the jackpot [in Vegas] and the person who wins the Powerball lottery is asked to pose for reporters with a giant check." Stories of triumphant "little guys" also feature prominently in the narrative of Robinhood, the most popular fintech trading app.

In a pearl-clutching Wall Street Journal editorial, Robinhood's CEO Vladimir Tenev complained about offensive stereotypes of his investors as "uninformed gamblers looking to get rich quick." Instead, Robinhood's marketing materials feature pictures and quotes from an array of diverse, mostly young and attractive investors saying things like "I'm able to make financial decisions that grow my money and to help me buy a home" and "In a male-dominated world, it's really important for women to invest. I feel good when I can chime in – it gives me a confidence boost." It's right there in the name "Robinhood": an implicit promise that the app will allow its users to steal profits away from the rich. Robinhood proudly exclaims that "our mission is to democratize finance for all," but hopefully by now, any claim to "democratization" should be setting off your alarm bells...

Robinhood launched its trading app in 2014, backed by prominent venture capital firms like Andreessen Horowitz. It was the first brokerage firm to optimize for trading on a smartphone, and everyone tends to agree that Robinhood's app is fun to use. Robinhood's slick app doesn't fully explain the company's growth, though. That growth is at least partially attributable to Robinhood skirting the regulations applicable to securities brokers, which are administered by the Securities and Exchange Commission (usually referred to as the SEC) and by the brokerage industry's self-regulating body FINRA.

By the time Robinhood had its IPO in July 2021, it had already racked up $165 million worth of fines from the SEC and FINRA. Notably, the SEC levied a $65 million fine on Robinhood in December 2020 for misleading its customers about how the business made money, making clear that "innovation does not negate responsibility under the federal securities laws." In June 2021, FINRA slapped Robinhood with a record-breaking penalty of almost $70 million, and also issued an exasperated statement that called out Robinhood for inflicting widespread and significant harm on its customers: "Compliance with these rules is not optional and cannot be sacrificed for the sake of innovation or a willingness to 'break things' and fix them later."

A huge part of Robinhood's appeal for its customers is that it doesn't charge commissions for trades, making trading seem free. But the old chestnut "if you're not paying for the product, you are the product" applies here. Instead of relying on customer commissions, Robinhood makes most of its revenue from payment for order flow – a practice pioneered by Bernie Madoff (yes, that Bernie Madoff) in the 1990s. Instead of sending a customer's trading order to an exchange, Robinhood instead routs the order to big Wall Street trading firms like Citadel Securities to fulfill. These trading firms then pay Robinhood for the privilege of filling the customer's order. The payment is usually only a fraction of a cent per trade, but all those fractions can really add up – Robinhood earned $974 million from payment for order flow in 2021.

And so the more its customers trade, the more Robinhood earns. The Citadels of the world are willing to pay for order flow because they can arrange a better price for the trade than the one Robinhood's customers agreed to pay: the worse the trade a customer agreed to, the more Citadel can pocket (in *The Revolution That Wasn't*, Jakab notes the Citadel will pay more for Robinhood's order flow than they will for orders placed by the more staid clients of the brokerage firm Charles Schwab). In other words, the more unsophisticated its traders, the more Robinhood earns. But could Robinhood's customers get their orders filled more cheaply elsewhere? Is Robinhood more interested in keeping Citadel happy than doing right by its customers? Concerns about these kinds of conflicts have led to payment for order flow being banned in the UK, Australia, and Canada, and the SEC has at times mulled over whether the US should follow suit.

For now, the practice is still allowed in the US, but US brokers *are* required to execute their customers' orders on the best terms reasonably available. In 2020, the SEC fined Robinhood for providing its customers with worse execution prices than rival brokers – so the conflicts of interest we just discussed seem to be more than just theoretical. Reliance on payment for order flow must also be disclosed to customers, and Robinhood doesn't have the best track record when it comes to making the required disclosures either. Most egregiously, at some point during 2016, Robinhood intentionally removed all references to payments from trading firms from its FAQ "How does Robinhood make money," apparently because the author Michael Lewis had criticized payment for order flow in his bestselling book *Flash Boys*. This was a big omission, given that the majority of Robinhood's revenue came from payment for order flow at the time. Instead, Robinhood lent heavy into the techno-solutionist rhetoric and told its customers that Robinhood made money because "We cut out the fat that makes other brokerages costly – hundreds of storefront locations and manual account management."

An app that allows customers to trade frictionlessly, anytime, anywhere, seemingly for free, will certainly turbocharge the number of trades made, and Robinhood has also encouraged its customers to trade even more with the same kinds of tricks that social media apps use to keep you glued to your device (confetti when you trade; push alerts when the markets move). Unfortunately, compulsive trading doesn't typically work out well for everyday people.

As the Nobel Prize-winning economist Daniel Kahneman explained in his book *Thinking Fast and Slow*, "for the large majority of individual investors, taking a shower and doing nothing would have been a better policy than implementing the ideas that came to their minds." One academic study that focused specifically on Robinhood investors stated very academically that "intense buying by Robinhood users forecast negative returns." To put it more colloquially, the vast majority of the time, professional traders will eat the lunch of the retail investor tap tap tapping away on the Robinhood app. And to give you an idea of what is meant by "intense buying," in the first three months of 2020, Robinhood customers traded 40 times as many shares as Schwab customers.

All eyes were on Robinhood in late 2020 and early 2021, when it was the app of choice for everyday investors participating in the meme stock frenzy that later became the subject of the 2023 movie *Dumb Money*. Paul Dano stars as unassuming outsider Keith Gill (aka Roaring Kitty on YouTube aka DeepFuckingValue on Reddit), a Massachusetts native who developed a large social media following for his videos explaining his bullish stance on GameStop's fundamentals and his "I like the stock" posts on the WallStreetBets reddit. The movie also follows the fictionalized paths of some of Gill's followers, many of whom were actively trying to engage in a "short squeeze" to stick it to the hedge funds who were betting that GameStop's stock would crater (if investors could drive GameStop's stock price high enough, hedge funds would have to bail out of their short positions by buying the stock at the higher price, which would be punishing for those hedge funds *and* drive GameStop's stock price up even more). A Hollywood movie needs an inspirational Hollywood ending, and so *Dumb Money* ends with the words "the movement [Gill] started is only just beginning. Because of the GameStop rally, 85% of hedge funds now scour the internet to see where retail traders are investing."

Sadly, in the real world, an increased volume of retail trades highly scrutinized by hedge funds doesn't count as a win for most little guys. When another mini-meme stock rally happened in 2024, one industry insider observed that "hedge funds are much better equipped to handle these situations nowadays…If anything, we believe the chances that they...exit these trades ahead of retail traders are high." In this light, "democratizing finance" by encouraging more retail customers to trade more often seems less like financial empowerment and more like letting sophisticated trading firms shoot fish in a barrel. This is especially true when retail customers are trading options, where payment for order flow is particularly lucrative for brokers like Robinhood. When FINRA ordered its $70 million penalty in 2021, it expressed particular concern about Robinhood's customers using the app for options trading (in early 2020, Robinhood customers made *88* times as many risky option trades as Schwab customers).

If you're not familiar with options (and most people aren't), the most basic ones give investors the right to buy or sell stock on a specified future date at a specified future price (known as the strike price). Let's use a call option – aka the right to buy a stock – to illustrate. If you buy a call option and then the market price of the stock turns out to be higher than the strike price on the specified date, the option is described as "in the money." In other words, you win. But if the market price falls below the strike price, then the call option will end up completely worthless.

Contrast that with an investor who bought the stock directly – if the market price falls, their stock will be worth less than what they paid for it, but it typically retains some value.

Even simple options trading is very risky, but Robinhood also makes available many option trading strategies that are much more complicated and risky than the ones we just discussed. All in all, most investors incur substantial losses on their options trading, and because of the risk involved, regulated brokers like Robinhood are required by law to screen customers before approving them for options trading. Robinhood depends heavily on payment for order flow from its customers' option trading, though (in 2023, options trading made up almost two-thirds of its transaction-based revenue). Given Silicon Valley's tendency to view regulatory compliance as optional, you won't be surprised to hear that Robinhood has let an awful lot of unsophisticated customers trade options.

According to FINRA, Robinhood delegated its legally-required customer screening process almost entirely to algorithmic bots, and those bots approved thousands of customers for options trading in a way that was inconsistent with those customers' expressed risk profiles. Many customers who weren't automatically given access to options trading were easily able to manipulate the bots to let them do so. For example, one customer opened a Robinhood account and reported having "no investment experience and a low risk tolerance," and so was not granted access to options trading. Eight days later, she upgraded her risk tolerance to medium and said she had 1-2 years of options trading experience, and she was immediately approved for options trading. She changed her settings 14 times that day, and once she said she had three or more years option trading experience, she was immediately cleared for the most sophisticated options' trading strategy.

Also according to FINRA, Robinhood made misleading statements to its options trading customers, falsely telling them that they couldn't lose more than the premium they paid for their option. But many of them lost much more because Robinhood allowed them to select complex options trading strategies that involved margin (i.e. borrowed money) – even if they had expressly elected to disable the use of margin on their app. The real kicker for me, though, is that FINRA also had to tell Robinhood to get its house in order technology-wise. Even if we accept the limitations of what technology can do, we tend to assume that a technology company will at least be good at the technology part. But here, a supposedly Luddite regulator was the one that had to tell the fintech firm to focus on its technology.

FINRA blasted Robinhood for outages that occurred during periods of heavy usage because Robinhood failed to devote enough resources to maintaining its technological plumbing. Over the years, Robinhood's systems had also erroneously informed thousands of customers that margin calls were coming (and sometimes gone so far as demanding that customers pony up funds to satisfy those mistaken margin calls). FINRA also found that Robinhood's systems had displayed inaccurate account balances to millions of customers. In one particularly tragic incident, a 20-year old man named Alex Kearns was able to place options trades involving margin, even though he had disabled margin trading on the app. He suffered losses, but the app inaccurately displayed his account balance as negative $730,165.72 – much worse than the reality. Unable to reach Robinhood customer service and thinking he had exposed his family to financial ruin, Kearns killed himself in a devastating turn of events.

So many online platforms trumpet the cost savings from eliminating brick-and-mortar premises and customer service personnel, but we've all had bad experiences – much less dire than this one but bad nonetheless – when we desperately needed to talk to a person but couldn't find one.

The stakes have always been high when it comes to people's money: that is why finance is so highly regulated. Fintech entrepreneurs, who want to deploy the standard Silicon Valley move-fast-and-break-things playbook, chafe under that regulation – perhaps because they never bothered to learn about what can go wrong in traditional finance, or perhaps because they don't care. Robinhood CEO Tenev concluded his 2021 Wall Street Journal editorial by saying:

> *The democratization of markets threatens the existing order. New investors are trying to build stable financial futures and reverse the inequities that plague our society. One wonders whether the push to ban payment for order flow and overregulate modern design is about investor protection or really about control. Whatever the motivation, making it more difficult to invest would hurt those who were shut out of the financial system for decades. Many Americans face suffocating debt and financial challenges, and more regulation would make it harder to build wealth. Rather than regulating financial innovators out of existence, it is in our collective interest to embrace technology, business models and policies that*

make it possible to build a more diverse generation of investors—one that looks like America.

We now know enough to take this soaring techno-solutionist rhetoric with a few heaping tablespoons of salt. Robinhood isn't threatening the Wall Street order; it's feeding Wall Street traders with Robinhood customers' orders. If the SEC and FINRA hadn't intervened with enforcement actions, Robinhood would probably still be misleading its customers about how it makes its money and letting the most inexperienced of investors make the most complicated of trades. Even after those enforcement actions, Robinhood's business model continues to encourage people who can ill-afford to lose money to trade like they're playing slot machines. It takes a lot of chutzpah to wrap oneself in the flag and argue that Americans need to gamble themselves out of economic precarity entrenched by structural and political forces beyond their control, but of course, Tenev justifies this by invoking the magical totems of technology and innovation. And in 2025, he did it all again in a pro-crypto op-ed titled "An investing revolution is coming. The U.S, isn't ready for it" because – did I forget to mention? – Robinhood also offers crypto trading services.

Bitcoin is BS

The crypto industry takes the rhetoric about the little guy sticking it to the man and turns it up to eleven. The first crypto asset was bitcoin, launched at the beginning of 2009 by someone using the pseudonym Satoshi Nakomoto. Nakomoto's vision was for "a purely peer-to-peer version of electronic cash [that] would allow online payments to be sent directly from one party to another without going through a financial institution." In the wake of the 2008 crisis, people understandably wanted an alternative to the financial institutions that had brought the entire financial system and global economy to the brink of collapse. Who wouldn't want a financial system where we didn't have to rely on those institutions? Let's go further: who wouldn't want a financial system where there were no intermediaries at all, and so there would never be a need to repose your trust in anyone who might abuse it?

Also, who wouldn't want world peace? Who wouldn't want a pet unicorn, for that matter? (actually, probably not me – cleaning up glitter manure sounds too much like my day job as a mom). My point is, there are many things that sound good but are entirely unrealistic. Bitcoin's promises of democratization and decentralization are unrealistic because the blockchain technology on which it is based doesn't meaningfully alter the economic incentives of the people who use that technology. People involved with bitcoin still have incentives to consolidate economic control, and once they've done so, they have the same incentives that financial intermediaries have always had to exploit and profit from that control (what most of them *don't* have is any obligation to comply with the consumer protection regulations that apply to traditional financial intermediaries).

Despite the "trust-free" hype, when you buy and trade bitcoin, you are at the mercy of a whole lot of people, from the handful of software developers who maintain bitcoin's code, to the small group of "miners" who validate transactions in bitcoin, to the crypto exchanges that most people use to buy, hold, and sell their bitcoins. And what about those terrible, horrible traditional financial institutions that bitcoin was supposed to do away with? Well, a bunch of them have joined the party too. For example, the financial giant BlackRock (we're talking more than $11 trillion with a "T" of assets under its management) started offering a bitcoin exchange traded product in 2024, making it much easier for people to invest in bitcoin.

If one were being charitable, one might see bitcoin as an elegant solution to the academic puzzle of how to prevent bad actors from "double spending" a virtual currency – but it's a solution that only works in a theoretical world where no particular individual exercises outsize control of the underlying blockchain. Here in the real world, there's no getting away from the few core software developers and mining companies responsible for keeping bitcoin up and running. Bitcoin users can avoid relying on crypto exchanges if they really want to, but the effort it takes to do so is prohibitive for all but the most hardcore bitcoin devotees. And so centralized power structures are an integral part of the bitcoin landscape, but bitcoin still follows Nakomoto's inefficient and wasteful process for validating bitcoin transactions – a process that was designed for an intermediary-less world.

Bitcoiners get really mad when I say all that, so let me spell out the realities more fully. Any person with a computer could theoretically compete to validate bitcoin transactions and get paid for their service, but they will inevitably lose out to the big mining companies (like the publicly-traded Riot Platforms) that run warehouses full of extremely expensive computing equipment, trying to guess the random number that will win them the right to add a new block of transactions to the blockchain. Because this convoluted process must run its course before any bitcoin transactions can be validated, the bitcoin blockchain can only process an average of seven transactions per second (whereas Visa can process about 24,000), and all those computers guessing random numbers use roughly as much energy as an entire country like the Netherlands (those who fail to guess first burn all that energy for nothing, keeping up demand for fossil fuels at a time when the world desperately needs to reduce our use of them). And then those computers burn out after a couple of years, also generating roughly as much hazardous electronic waste as the Netherlands, according to Peter Howson's book *Let Them Eat Crypto*.

And all this waste is for what exactly? Although Nakomoto intended that bitcoin would be used for payments, bitcoin's inefficiency and price volatility have ensured that most people don't want to use it to pay for things (unless they are trying to avoid money laundering rules or economic sanctions…). To give you a flavor of bitcoin's volatility, let's take the random date of March 1 and see what the price was on that date each year from 2020-2025:

March 1, 2020	$8,562
March 1, 2021	$49,631
March 1, 2022	$43,355
March 1, 2023	$23,647
March 1, 2024	$62,441
March 1, 2025	$86,273

Wild price swings are common even within short periods: bitcoin's price one week before March 1, 2024 was $50,732, and one week after was $68,300. If a cup of coffee costs the equivalent of $4 on Monday, $1 on Tuesday, and $6 on Wednesday *and* it can take a few hours for the transaction to be processed, that's simply not going to work as a type of money – especially not for those who need to monitor every dollar in their budget and don't have time to waste waiting around for payments to go through. And unpredictability and delay aren't the only stumbling blocks for bitcoin adoption. There's also the possibility that bitcoin's value could swing up – why would you spend something that could potentially be worth a lot more in a few days if you held on to it?

This isn't an entirely theoretical debate. The country of El Salvador, under the leadership of its bitcoin evangelist President Nayib Bukele, actually tried making bitcoin legal tender in 2021. Bukele trumpeted the move as a win for financial inclusion (as well as innovation, of course), and given the challenges that El Salvador faces, bitcoin could presumably make it there if it could make it anywhere. According to the World Bank, only 36% of adult El Salvadoreans had bank accounts in 2021, and the country's economy relies heavily on remittances from abroad. Still, only a fraction of the El Salvadorean population used bitcoin for payments and only about 1% of remittances were sent in bitcoin (many of those who *did* use bitcoin for payments in El Salvador were tourists, and wealthier young local men who match the profile of crypto bros everywhere). In 2025, El Salvador called it quits – bitcoin is no longer legal tender in that country.

Around the world, most of the people buying bitcoin view it as an investment rather than a means of payment. But why on earth would a notation on a spreadsheet (which is really all a bitcoin is) be valuable without anything real backing it? Well, here – presented in abbreviated bullet form for your convenience – is what the industry and the bitcoin faithful will tell you about why bitcoin has intrinsic value, and what I will tell you about why they are wrong.

- *Bitcoin is valuable because it is useful as a form of money*. Money needs to maintain a relatively stable value, but the stability we prize in money is no good for an investment where the appeal lies in its ability to become more valuable. As the Brookings Institute's Tonantzin Carmona has painstakingly explained, bitcoin can't be both money and an investment. Pick one. Better yet, pick neither.

- *Bitcoin is valuable because it is scarce.* Bitcoin was programmed to have a total fixed supply of 21 million bitcoins – but "programmed" is the operative word here. What is often treated as a law of nature is actually a function of bitcoin's computer code, which means it could be changed. In 2018, a crypto news outlet reported a bug that left the bitcoin network "vulnerable to hackers who could have…inflated its fixed supply of 21 million." The bug was ultimately patched before any hacker could exploit it, but that fact remains that an expansion of bitcoin supply – although unlikely – remains possible.
  - Here's an even shorter response: even if bitcoin's scarcity were guaranteed, a fixed supply of nothing is still nothing.

- *Bitcoin is valuable because so much energy was burned creating it*. Imagine two identical houses are built on the same size plots of land in the same neighborhood. One was built by a contractor that tried to be as energy efficient as possible; the second house was built by a contractor that was super wasteful as they built. Would you be willing to pay more for the second house as a result?...I didn't think so.

- *Bitcoin is valuable as a hedge*. Bitcoin is sometimes referred to as "digital gold," implying that holding it can offset the risk that your cash savings will lose value because of inflation. As the gold bugs like to say, while central banks like the Federal Reserve can print more money and therefore make your cash less valuable, they can't print more gold. Now, this is neither the time nor the place to go into why the historical practice of pegging currencies to the gold standard was abandoned, but even if this lack of flexibility *were* desirable (just to be clear, it's not), bitcoin wouldn't necessarily cut it because it remains possible to increase the supply of bitcoin. More fundamentally, a hedge is supposed to protect an investor by reducing their risk and providing more certainty – but given bitcoin's price volatility, and the fact that bitcoin's price tends to follow similar trajectories to stock prices, it really doesn't deliver on that front either.

And so all of those arguments are bunk. Bitcoin *has* proved quite useful for money laundering and sanctions evasion (I once saw someone explain bitcoin online by posting "imagine if keeping your car idling 24/7 produced solved Sudokus you could trade for heroin"). I'd like to think, though, that there wouldn't be broad public support for an investment that exists primarily to help criminals crime and geopolitical adversaries adversary...

The only reason why bitcoin has any (legal) value is because someone might buy it from you at a price higher than the price you paid for it: demand for bitcoin was driven primarily by Chinese speculators in the early years, and then bitcoin speculation became more of a global pastime. But the price of bitcoin might also go down – in fact, with nothing backing it, it could plausibly go to zero very quickly – so trading bitcoin is really just a big gamble. And as is always the case when you gamble, the odds are stacked in favor of the house (here, the miners and the largest holders who are known as whales).

Research from the Bank for International Settlements found that in the period from August 2015 to December 2022, the majority of bitcoin investors lost money and "larger investors probably cashed out at the expense of smaller holders" – or, as the report put it more evocatively "in stormy seas, the whales eat the krill." In addition, the miners get to decide the order in which bitcoin transactions are processed, and whales will sometimes pay these miners to let them trade ahead of the krill – a practice that's not unlike Robinhood's payment for order flow, only worse because the miners aren't covered by any of the regulations requiring broker-dealers to act in the best interests of their customers.

Also, when I said just before that "the only reason why Bitcoin has any value is because someone might buy it from you at a price higher than the price you paid for it," your ears might have pricked up a little bit and you might have thought to yourself, "well, that sounds a bit like a Ponzi scheme, doesn't it?" Why yes it does a bit! "Democratizing finance" is essential to bitcoin's very existence as an asset with nothing backing it: unless an everlasting supply of new money can be drawn into buying bitcoin, then its price will start to go down whenever the whales cash out, potentially toppling the whole edifice. The price of bitcoin is certainly manipulated to try and stop that from happening (one study found that on average, 70% of the reported trading volume on unregulated crypto exchanges was wash trading, meaning that the same people were trading back and forth with themselves to make it look like lots of people were buying). But wash trading can only do so much, and bitcoin will always need to draw in more people willing to bet on it.

The crypto industry

Notwithstanding Satoshi Nakomoto's dream of disintermediating finance, an entire industry has emerged around bitcoins and other crypto assets – and it really is an indictment of how scammy the rest of the crypto industry is that bitcoin is widely regarded as the most credible crypto asset out there. As I told the Senate Banking Committee in December 2022, "when an entire industry is built on an asset type that can be manufactured at zero cost, has no fundamentals, and trades entirely on sentiment, traditional checks on fraud (like valuation methodologies and financial accounting) will inevitably break down." But in retrospect, I didn't fully appreciate the brazen contempt the crypto industry has for its investors.

An eye-opener for me was the book *Crypto Confidential*, in which former crypto insider Jake Donoghue describes his experiences during the 2020-22 crypto boom. He vividly illustrates how pervasively crypto industry insiders (ranging from project developers to venture capitalists to social media finfluencers) viewed crypto offerings as a purely cynical exercise in pump and dump – the underlying projects outlined in associated white papers were more often than not a pretense and an afterthought.

If you're not familiar, a "pump and dump" involves using hype to get others to buy an asset and thus inflate its price, and then dumping your own holdings of that asset at the top of the market – driving down the price for the poor suckers you convinced to buy high. "Democratizing finance" in a pump and dump unequivocally means finding more people to exploit; ditto when it comes to rug pulls, which similarly use hype to attract investors, but then the project developers flat out steal investors' money. Unfortunately, the emergence of crypto has required us to develop a whole new lexicon of scam words, from rug pulls to pig butchering (a riff on "fattening a pig for slaughter," where the scammer seduces or otherwise builds trust with the victim online before encouraging them to invest in a crypto fraud).

There have also been a number of instances of crypto *exchanges* stealing their customers' crypto assets – with Sam Bankman-Fried's FTX exchange being the most notorious example. But even the "good" crypto exchanges that aren't stealing their customers' assets have some seriously problematic conflicts of interest. Securities brokers like Robinhood are not legally permitted to also perform the functions of the New York Stock Exchange. There would just be too many temptations for an integrated broker/exchange to bet against its customers (knowing more than its customers ever could about what other orders were being placed at what prices, and having the ability to cancel any of its own unprofitable trades), as well as to manipulate prices and order transaction processing in a way that favors itself or the highest bidder. But crypto exchanges like Coinbase *do* integrate these broker and exchange functions, arguing that the laws that apply to securities brokers and exchanges don't apply to them (Coinbase was, incidentally, the first crypto startup to be funded by Andreessen Horowitz, the venture capital firm that backed Robinhood).

Even when crypto industry insiders aren't out to exploit investors, the hackers might be: blockchain technology is designed to only allow transactions to be added to the blockchain and not to reverse them, so once your crypto is gone, it's gone. That's a very strong incentive for hackers to scour the code of crypto assets and their underlying blockchain infrastructure to look for vulnerabilities to exploit. Catty crypto bros online will often retroactively scold those who lose money to hacks for not "doing their own research," but it's entirely unreasonable to expect the average investor to have enough technological sophistication to audit the code of their crypto for vulnerabilities. As I sometimes tell my students, if you must gamble, then please at least do it in a casino where your chips aren't going to get stolen.

According to crypto researcher Molly White's *Web3 is going just great* tracker, the total amount lost to crypto industry "grifts and disasters" as of June 2025 was more than $78 billion. This is egregious, but it also isn't entirely unprecedented. If you read the following excerpt from the U.S. Congressional record, you could easily be forgiven for thinking that it was describing the crypto industry:

> *Some 50 billion of new securities were floated in the United States. Fully half or $25,000,000,000 worth of securities floated during this period have been proved to be worthless. These cold figures spell tragedy in the lives of thousands of individuals who invested their life savings, accumulated after years of effort, in these worthless*

> *securities. The flotation of such a mass of essentially fraudulent securities was made possible because of the complete abandonment by many underwriters and dealers in securities of those standards of fair, honest, and prudent dealing that should be basic to the encouragement of investment in any enterprise. Alluring promises of easy wealth were freely made with little or no attempt to bring to the investor's attention those facts essential to estimating the worth of any security. High pressure salesmanship rather than careful counsel was the rule in this most dangerous enterprise.*

But this excerpt isn't from the 2020s; it's from 1933. It's describing the chaos that resulted from massive amounts of stocks and bonds being created out of thin air in the 1920s. The ensuing stock market crash and Great Depression inspired the passage of new investor protection laws, and the creation of the Securities and Exchange Commission to oversee them – in other words, we already have laws on the books to address many of the harms the crypto industry inflicts on the public. But as later chapters will explore, the crypto industry has worked hard to convince legislators, courts, and regulators that these longstanding laws should not be applied to it. If these laws were uniformly enforced against the crypto industry, then crypto assets could no longer be made up out of thin air and market manipulation would be illegal and crypto exchanges could no longer perform their conflicted double role of broker and exchange.

Unfortunately these laws have not been uniformly enforced, and crypto investors have suffered as a result. As the 2020-22 crypto boom collapsed into 2022's "crypto winter," roughly $2 trillion of notional value was erased from the global crypto markets. In Pew Research surveys conducted in March 2023 and February 2024, roughly two-thirds of Americans said they weren't confident in the safety or reliability of crypto. The crypto industry was in the doldrums and one dispirited crypto insider lamented in 2024 that most crypto "is lost at sea. Solutions looking for problems at best, a relentless and brutal grift at worst," and the only real hope was victory for a Trump administration that would embrace the crypto industry. That insider got his wish, at least to some degree. The second Trump administration hasn't made crypto seem any less grifty – Trump has launched many of his own crypto projects, including a "memecoin" that promptly lost money for 764,000 small accountholders while 58 big accountholders made over $10 million each. But as we will explore in later chapters, under Trump, regulators have downed tools on enforcing the law against crypto companies. This will certainly make it easier for people to buy crypto.

But if we were to pretend for a second that any of this was about more than crypto industry profitability, we'd have to ask what making more crypto more accessible solves beyond further democratizing exploitation. And maybe "democratizing exploitation" is the wrong term to use here, because that implies equal opportunity exploitation. Some surveys suggest that more economically vulnerable groups – like young men, as well as Black and Hispanic investors – are disproportionately investing in crypto, and therefore disproportionately being exploited. There was even a Crypto Kids Camp in LA, ostensibly founded to allow underserved communities to build wealth: its founder was quoted as saying "[i]t's important to catch our kids when they're young to help them open their minds."

Frankly, I find it pretty gross that something as unsecure, volatile, and downright Ponzi-like as crypto is being marketed to economically precarious members of our society (and to children!) as a means of empowerment – just so the biggest whales can cash out and the intermediaries can profit (and the criminals can continue to crime profitably, and the fossil fuel industry has someone to keep selling brown energy to…). And so when I read an article about billionaire rapper Jay-Z offering "Bitcoin Academy" courses to residents of the Brooklyn public housing development Marcy Houses, I was relieved to hear that 58-year old resident Myra Raspberry knew that even if she were going to gamble, she shouldn't bet on bitcoin: "Every dime I get got to go to rent, phone, TV and internet" she was quoted as saying. "I don't have money like that to be losing. If I did, I would try to invest in something that's more reliable, like the basketball game last night. You know I'm going to win something from that."

Credit = Debt

But of course, like so many other Americans, Myra Raspberry didn't have any spare money to gamble or invest in the first place. This is why no flashy fintech purporting to create new investment opportunities, or to make investing easier, is going to solve the economic precarity problem: even good investment opportunities mean nothing if people can't afford to take advantage of them. There's an oft-cited statistic that nearly half of all Americans couldn't come up with $400 in an emergency. That statistic is a little misleading: it comes from a survey conducted by the Federal Reserve where the actual question asked is whether the respondent could cover an unexpected $400 expense entirely with cash. In 2023, 13% of surveyed Americans said they couldn't come up with that $400 at all, whereas 31% said they would have to do what people without wealth typically have to do when life deals them a bad hand – they'd have to borrow.

Unfortunately, borrowing money necessarily results in a debt that must be repaid. Credit and debt are two sides of the same coin, although this seemingly obvious reality is often neglected in policy discussions. Instead, a lot of pro-credit policy assumes that as long as marginalized people can borrow money, their financial difficulties will be solved and economic equality can be achieved. But as law professor Abbye Atkinson puts it,

> *the increased ability to borrow money, cast as a mechanism of positive social change, may function in some ways as a Trojan horse, wheeling in the unique dangers of indebtedness to the front gates of marginalized communities and threatening their already tenuous socioeconomic existence.*

Even reasonably priced debt can prove difficult for borrowers to pay off, particularly if those borrowers are plagued by structural income inequalities. To give just one example, research from 2022 indicates that Black women earned only 64 cents for every dollar earned by non-Hispanic white men. This means that the same dollar amount of debt is typically going to be a greater burden for Black women to pay back than white men. But when the interest rates being charged for a loan are very high – which they typically are when the borrower is in a precarious financial position – that debt can become a trap from which borrowers cannot extricate themselves.

Take payday lending, for example. Payday lenders extend a relatively small amount (typically $400) for a fixed period (typically two or four weeks), ostensibly as a bridge to the borrower's next payday. Many of these loans don't charge an interest rate per se, but they do charge a fee for the loan. If borrowers are unable to pay back the loan after two weeks and find themselves having to roll over one loan into another, they will rack up more fees – and when these fees are expressed as an annual percentage rate, they are typically in the triple digits (in some states, they can be more than 600% per annum).

These rollovers are what makes the payday lending business model profitable: borrowers who find themselves forced to choose between repaying a payday loan and covering rent, utilities, and other necessary household expenses will often end up trapped in this rollover cycle as exorbitant amounts of fees accumulate – according to one report, 75% of all payday lending fees come from borrowers who have taken out more than ten payday loans a year. Although fintech lending has often been marketed as a kinder, gentler alternative to payday lending's predatory inclusion, there is no reason to think that fintech will disrupt this vicious cycle. It may even reintroduce this vicious cycle into places that have banned payday lending.

When fintech lending first started out around 2007-8, it was advertised as a peer-to-peer model where startup platforms could connect everyday people who wanted to borrow with everyday people who wanted to lend. These startups claimed their business model would democratize credit for the borrowers *and* democratize investment opportunities for the lenders – and eliminate the need for badly-behaved financial intermediaries to boot. But economic incentives struck again. Screening borrowers is a lot of work and most people don't have the time or the experience to do it properly (or have enough funds to diversify their lending so they're not overexposed to a single borrower). Unsurprisingly, financial institutions quickly took over the lending function, and borrowers increasingly had to satisfy those lenders' demands for good credit scores and similar metrics in order to get a loan. What had been referred to as peer-to-peer lending became known as marketplace lending, and then just fintech lending.

According to the Federal Reserve, by the end of 2022, fintech lenders had $49.6 billion worth of personal unsecured loans outstanding, in 7.6 million accounts. These fintech lenders typically have excellent interfaces on their apps and websites that make it easy to apply for credit, and their approval times can be quicker than banks. But delightful interfaces and speedy processing aren't the only drivers of industry growth. Fintech lenders, by virtue of not being banks themselves, escape the costs of complying with banking regulation. But while most fintechs don't want to actually be banks, their business models are typically highly dependent on partnering with actual banks (for example, the leading fintech lender Avant partners with the bank WebBank). There are a number of reasons for these partnerships, but an important one is that fintech lenders want to piggy-back on banks' ability to charge higher interest rates than individual states would allow a non-bank to charge.

Please indulge me in a little bit of law professor-ing here – there is really no way around it and I'll try to keep it as brief as possible. Basically, a 1978 Supreme Court decision resulted in a situation where a bank can charge a borrower the interest rate allowed in the state where that bank's headquarters are located, even if the borrower lives in another state that caps interest rates at a lower level. Lenders that *aren't* banks, on the other hand, must abide by the interest rate caps in each state. From the 1990s until the mid-2000s, payday lenders often engaged in so-called "rent-a-bank" arrangements where banks would extend the loans, but the payday lender would be the borrower's point of contact and would buy the loan from its partner bank once it had been extended. For a while, this kind of arrangement allowed payday lenders to do an end run around state interest rate caps, but banking regulators ultimately frowned on the practice because of the reputational and other risks it posed for the banks involved. By 2004, banking regulators had pretty much put an end to banks' entering into these rent-a-bank relationships with payday lenders. Ok, lecture done – now back to our regularly scheduled programming.

Fintech lenders are now pursuing their own version of rent-a-bank relationships, and the banking regulators have largely let it happen – I suspect in part because of, you know, not wanting to stop innovation. But we shouldn't kid ourselves. Once again, the key innovation here is a legal workaround, not a cool app. Many fintech lenders serve customers who have good enough credit scores to borrow from a traditional bank (again according to the Federal Reserve, the median credit score of a borrower obtaining an unsecured personal loan from a fintech lender in 2022 was 673, which is generally considered a fair credit score). But for borrowers with poor credit scores, fintech lenders can be every bit as predatory as traditional payday lenders, even though their slick technological interfaces have put lipstick on the payday lending pig.

Let's look at Elevate, a fintech lender "founded on a legacy of data and innovation" that targets borrowers with lower credit scores. Elevate offers two products, Rise and Elastic. According to the National Consumer Law Center, Elevate partners with two Utah banks to offer the Rise product, "installment loans of $500 to $5,000 with APRs of 99% to 149% in several states that do not allow those rates for some or all loans in that size range." Through a partnership with a Kentucky bank, Elevate offers the Elastic line of credit "at an effective APR of about 100% in a number of states that do not allow that rate." Although Elevate has been at pains to distinguish itself from payday lenders, emphasizing its mobile-optimized online application process and its AI-enhanced automated customer screening process, these predatorily high annual percentage rates would be right at home in a payday lending operation (and they can be exported throughout the United States because Utah and Kentucky both allow their banks to charge whatever interest rates the parties agree to). Also, Elevate clearly anticipates that many of its loans will be rolled over – remember that rollover is key to the profitability of traditional payday loans – because it advertises that repeat customers in good standing get a rate reduction on refinancings and subsequent loans.

Is it credit?

While some fintech lenders attempt to distinguish their loans from payday loans by pointing to their use of technology, other fintech firms go a step further and try to argue that their loans aren't loans at all. Caps on interest rates (and some other consumer protection requirements, like standardized disclosures regarding the total cost of credit) won't apply if the authorities can be convinced that no credit is being offered. Financial regulators have increasingly had to make judgments about whether fintech businesses like "buy now pay later" and "earned wage access" are credit, or something else. These products typically charge users flat fees instead of interest rates, but if sliced differently, flat fees can be translated into annual percentage rates (and vice versa). Functionally, if someone is being charged to borrow money and that money needs to be repaid in the future, then it's credit.

Buy now pay later or "BNPL" describes a loan made available to consumers at the point of sale. Users buy a product from a merchant (typically online), receive it after paying the first installment, and then are on the hook for paying the remaining installments, typically every two weeks. The use of BNPL in the United States increased significantly in the United States as people started shopping online more during the Covid pandemic and as stimulus checks and low interest rates created more purchasing power, but the product continued to be popular even as those dynamics changed. According to a 2025 survey by LendingTree, roughly half the people surveyed had used BNPL, with some even using it to pay for groceries.

Because no interest is charged, BNPL might not seem like a credit product at first blush, but there are many fees buried in the fine print. In particular, consumers who don't make their installment payments on time are charged late fees that can operate as a type of retroactive interest charge (and some BNPL providers will ding users' credit reports when this happens). The Federal Reserve found that 18% of BNPL users surveyed had missed a payment in 2023, and 11% of BNPL users reported that they had been charged extra for paying late. Another source found that more than a third of BNPL users have fallen behind on payments. BNPL users are disproportionately likely to have other kinds of consumer debts and once BNPL late fees start piling up, it can end up being more expensive than a credit card. BNPL is disproportionately used by Black and Hispanic customers, and by lower income consumers – so once again we need to ask, is this democratization for these groups, or exploitation?

BNPL's technological innovations are slick apps (yet again) and seamless integration into online shopping webpages – all designed to make it easier for people to obtain this kind of credit. While BNPL provider Affirm (yet another Andreessen Horowitz funded fintech firm) prides itself on how its "data-driven approach looks beyond a standard credit score to reach broader consumer populations," one report emphasized that the vast majority of BNPL users already have access to and regularly use traditional forms of credit like credit cards as well. Notwithstanding the democratization rhetoric, the business model seems to be less about expanding access to credit for underserved populations and more about expanding how much credit is available to already served populations. For some people, easy access to credit for non-essential goods equals debt that can cause real problems. When researchers studied TikTok content relating to Klarna (another BNPL platform), they found many mentions of "over-consumption, unaffordable borrowing, and over-indebtedness…indicated by, among other things, the use of hashtags such as "addiction," "no money," "broke," and "missed payment."

BNPL may encourage consumers to take on debt unnecessarily, but earned wage access products bring us back to the subject of debt that is, sadly, a necessary last resort for many who suffer from financial precarity. These products allow for earned-but-unpaid wages to be transferred to workers, helping them to deal with with immediate expenses like groceries and gas. Marketed as a win-win alternative to payday loans, earned wage access programs grew in popularity during the Covid pandemic. Some are sponsored by employers, but other direct-to-consumer earned wage access business models replicate many payday lending features. If we look beneath their shiny tech veneer, it's not entirely clear that there's much daylight between them and payday loans – despite the earned wage access industry's claims that it's just transmitting paychecks early and not extending credit.

For example, the Andreesen Horowitz-backed earned wage access fintech Earnin makes advances to its customers based on estimates of how much they earn (these estimates are generated by monitoring customers' bank accounts, and for some products, by tracking customers' location to see if they go to work – surveillance is part of the deal). As with both BNPL and payday lenders, there is no assessment of the borrower's other financial obligations and their impact on the borrower's ability to repay. Instead, Earnin is pre-authorized to deduct repayment amounts from customers' bank accounts on their paydays. If there are insufficient funds in their account at the time of the withdrawal, customers can incur fees from their banks (in 2021, Earnin settled a class action from customers alleging that it had misled them about the risk of bank fees, which were incurred when Earnin debited customer bank accounts even though it could see they had insufficient funds).

Earnin doesn't charge an explicit fee for its services – instead, it uses a seemingly voluntary tip structure. However, some researchers and consumer advocates have questioned how voluntary these tips really are. In a report based on 2021 data, financial regulators in California found that tip-based EWA companies succeeded in using design features and psychological nudges to push consumers to tip 73% of the time: the average APR (representing the total cost of using the service) for these tip-based companies was 334%. More specifically pertinent to Earnin, law professor Nakita Cuttino explained that "Earnin has encouraged its users to pay a $9 tip for a one-week loan of $100, which would amount to an APR of 469%... illegal in Washington, D.C. and fifteen of the states where Earnin currently operates." Once again, the business model is not just about an app or webpage (or achieving efficiencies by cutting out customer service costs). The business model works because (at least in some states) it avoids laws that have been put in place to protect the economically precarious from predatory lending, and because of the economic precarity of its user base.

It's the economic precarity, stupid

These kinds of products aren't just used for emergencies; people come to depend on them to get by. When per use fees are high, that can leave users in a financial hole they cannot escape from. When a journalist asked Earnin's founder Ram Palaniappan if he thought the problem could be solved by paying people more, he responded that it's ""'always better for people to have larger paychecks," but stressed that there's a "timing issue" with when they get paid as well."" He concedes that "[g]iving people access to their money faster won't help solve the root causes of economic insecurity, but [says] it's a start."

This conversation gets at the crux of the policy debate when it comes to products like earned wage access: is half a loaf better than none, or is the half-loaf simply a band-aid that alleviates pressure for real reform? Or at least, that *was* the crux of the policy debate for most of fintech's young life. With seismic changes in government and public policy following President Trump's second ascension to power in 2025, traditional ways of thinking about public policy seem to have gone out the window. If we're blowing everything up, let's be bold and blow through our mindsets about what is politically feasible, because what does politically feasible even mean anymore? If we were free to just make good policy, what might real solutions to economic precarity look like?

The first thing to note is that technology will play at most a minor role in delivering real solutions to economic precarity. So much of the fintech we have seen so far is the technological equivalent of putting lipstick on a pig: slick web interfaces and apps that haven't really made any non-cosmetic changes to how financial services are delivered (and that's not just me being salty. The fintech industry body Innovate Finance said as much to a UK parliamentary commission when they submitted that "the first wave of FinTech innovation over the last decade transformed the customer experience and the 'front end' of financial services (user interfaces and consumer-friendly apps and platforms)." Silicon Valley may not even be able to solve problems that at first blush seem to be squarely technology problems. For example, people justifiably complain that payments – including paychecks – take too long to clear in the United States. When people have to wait up to three days to receive their money, they can be forced to use expensive check cashing services and earned wage access products like Earnit in order to pay immediate expenses. Slow payment processing sure seems like a technology problem – *but it is not a technology problem*.

I grew up in Australia and did most of my studies there, but I was an exchange student at Duke University back in 2002. I remember opening a bank account in Durham, North Carolina and they handed me a checkbook. I stared at it in disbelief – checks were largely obsolete in Australia by that time. I had to ask the teller for instructions on how to write a check because I had never written one before. Now it was the teller's turn to stare at *me* in disbelief. Anyway, I returned to Australia in 2003 and lived there until 2006. Even at that time, twenty years ago, I recall paying friends online and having the funds become available to them immediately (and just in case you don't trust my memory, here's a link to a report that confirms this was a relatively common thing to do at the time). That kind of technology could have been deployed in the United States decades ago, but it wasn't. There were economic and political forces at work that discouraged its adoption, and those are the kinds of forces we need to focus on if we want to make real inroads on economic precarity in the United States.

In addition to dispensing with superficial tech fixes, we'll also have to dispense with other politically useful fictions like the notion that economic wellbeing can be improved simply by lending more money to cash-strapped people. Because as Professor Abbye Atkinson points out, we treat "borrowing money as a social good and owing money as a personal failure." If people have no other option, then of course they will borrow, even at exorbitant rates and on predatory terms. Real solutions will focus on what is driving this need for credit. And it's not really all that complicated. In her book *The Land of Too Much*, sociologist

Monica Prasad finds that countries that encourage people to rely on credit to address their needs tend to spend less on welfare. That is something we can reverse – with more public support, people won't need to rely so much on credit. Congress will have to get involved to make this happen, and step one is mandating a minimum wage and ensuring social security benefits that people can actually live on. Step two is improving the public safety net.

In her insightful new book *Sharing Risk: The Path to Economic Well-Being for All*, law professor Patricia McCoy points out the good news about these kinds of policies:

> *in past decades the United States routinely used risk-sharing mechanisms to relieve ordinary families of excessive financial risk. Those same or improved mechanisms could be used today to alleviate households' financial distress.*

And then even better news:

> *A surprising number of programs more than pay for themselves through future tax revenues and other benefits.*

Things like expanding the availability of unemployment insurance, for example, would alleviate pressures for Americans to go into debt if they lose their jobs. And while expanded unemployment insurance would require government spending, the beneficiaries would turn around and spend the money they receive, helping to buoy the economy and create new jobs. McCoy reports that the Congressional Budget Office found that "enhanced aid to the unemployed during the Great Recession in 2009 had the biggest bang for the buck of any emergency economic aid, expanding gross domestic product by up to $1.90 for every dollar of benefits and producing up to fifteen new jobs for every million dollars in benefits."

McCoy also has proposals for expanded retirement and medical benefits and much more, all premised on her insight that it is profoundly unrealistic to hold all Americans individually responsible for insulating themselves from all the unexpected shocks they may face in life. According to McCoy, policies premised on such unrealistic expectations are often penny wise, pound foolish (like, you know, policies pushing the fintech solutions we've discussed in this chapter, which will "democratize" most users into even greater economic precarity). If we accept that factors beyond an individual's control contribute to their financial precarity, then the path to greater prosperity is through policies that allow society to share some risks as a collective endeavor. The alternative is to be haunted by the words of Professor Langdon Winner in the book *Engineering a Better Future*: "glowing hopes for "innovation"" will be "all that remains as more conventional doors to social betterment are slamming shut."

So yeah, fintech's promises to "democratize finance" drive me crazy, and I haven't even gotten into fintech's promises to "bank the unbanked." You'll have to wait for the next chapter for *that* part...