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The Shadow Banking System: The Trillions You Cannot See

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1. The money you cannot see



Most people picture the financial system as a row of banks. Deposits go in, loans come out, and a regulator watches the door. That picture was roughly accurate for much of the twentieth century. It is not accurate now.

At the end of 2024, institutions that are not banks held two hundred and fifty-six point eight trillion dollars in financial assets. That figure comes from the Financial Stability Board's Global Monitoring Report published in December 2025, covering twenty-nine jurisdictions that between them account for more than ninety per cent of world economic output. In that year the sector grew by nine point four per cent, roughly double the four point seven per cent growth of the banking sector, and its share of all global financial assets passed a symbolic line. Fifty-one per cent. More than half of the world's financial assets now sit outside the banking system.

These institutions have a name that sounds like an accusation. Shadow banks. The regulators who track them prefer a duller phrase, non-bank financial intermediation, partly because the older term implies something furtive, and most of this activity is neither hidden nor illegal. A pension fund is not a conspiracy. An insurance company is not a criminal enterprise.

But the older name captures something real. These institutions perform the economic functions of a bank without being one. They turn short-term money into long-term lending. They promise investors immediate access to cash while holding assets that cannot be sold immediately. They borrow to amplify returns.

And when those functions fail, they fail the way banks fail. With a run.

2. What a bank actually does



To see why that matters, it helps to be precise about what a bank does, because the magic is not in the building.

A bank takes deposits, which are short-term, safe and available on demand. It makes loans, which are long-term, risky and cannot be recalled. This is maturity transformation, and it is genuinely useful. Households want savings they can reach tomorrow. Businesses want finance they can keep for a decade. The bank stands between those two preferences and absorbs the mismatch.

It also performs liquidity transformation. Deposits are liquid. A thirty-year mortgage is not. The bank promises liquidity it does not hold.

Both of these work only because of confidence. No bank holds enough cash to repay every depositor at once, and none is designed to. If every depositor asks at the same time, the bank cannot pay, not because it is insolvent but because its assets are locked up. That is a run, and a run can destroy a solvent institution.

Societies decided this was too dangerous to leave alone. So banks were fenced in. Deposit insurance removed the depositor's reason to run. Capital requirements forced shareholders to absorb losses first. Liquidity rules required a buffer of assets that can be sold in a crisis. A central bank stood behind it all as lender of last resort.

That arrangement is a bargain. Banks accept supervision and constraint. In return they get a safety net.

The obvious question follows. What happens if an institution performs the same functions, takes the same risks, and never signs up to the bargain?

3. The same job, outside the perimeter



That is not a hypothetical. It is a description of a large part of modern finance.

A money market fund takes money from investors, promises it back on demand, and invests it in short-term debt. Economically, that is a deposit funding a loan. Legally, it is not a bank.

A finance company lends to businesses funded by bonds rather than deposits. A securitisation vehicle buys mortgages and funds them with commercial paper that matures in ninety days. A hedge fund borrows against securities to hold positions many times its own capital. An exchange-traded fund offers same-day dealing in assets that trade rarely.

None of these is a bank. Each is doing at least one thing banks do.

The regulatory perimeter is a line drawn around a legal form, not around an economic function. Activity moves. When capital rules made it expensive for banks to hold certain assets, those assets did not disappear. They moved to institutions where the rules did not apply. This is regulatory arbitrage, and it is not a loophole so much as a law of financial gravity. Risk flows to where it is cheapest to hold.

The scale of the shift is easiest to see in the United States. By 2023, non-bank financial assets there totalled eighty-five point seven trillion dollars, equal to three hundred and thirteen per cent of American economic output. Banks held thirty-one point one trillion, or one hundred and fourteen per cent. Non-banks were nearly three times larger.

Look at where companies get their money and the picture is starker still. Capital-markets non-banks supply more than seventy per cent of all financing to American non-financial companies. Bank loans supply eleven per cent.

For most large borrowers, the banking system is no longer the main event.

4. Measuring the sector



If more than half of global finance sits outside banks, you would hope somebody is counting carefully. The counting is harder than it sounds.

The Financial Stability Board publishes the broadest estimate, and it distinguishes between two measures. The wide measure is everything that is not a bank, a central bank or a public financial institution. That is the two hundred and fifty-six point eight trillion dollar figure, and it includes pension funds and insurers, which are not usually a source of instability. Pension funds grew seven per cent in 2024, insurers six per cent. These are long-horizon investors whose liabilities are decades away.

The narrow measure is the part regulators actually worry about. It captures entities doing bank-like work that could plausibly threaten stability: funds that offer daily redemption while holding illiquid assets, vehicles that depend on short-term wholesale funding, and firms using significant leverage. In 2024 that narrow measure reached seventy-six point three trillion dollars, and it grew twelve per cent, faster than the sector as a whole.

Inside the wide measure sits a category called other financial intermediaries, which reached one hundred and sixty-nine point four trillion dollars after eleven per cent growth. This is where money market funds, hedge funds, investment funds and structured finance vehicles live.

Even the Financial Stability Board, with the cooperation of twenty-nine national authorities, reports what it calls severe limitations in the data. Private credit is the clearest example. The sector has grown

quickly enough to attract the attention of every major financial regulator, and the report still cannot separate it out precisely.

That is worth sitting with. The organisation whose job is to monitor this sector, using data supplied by governments, cannot fully measure one of its fastest-growing parts.

5. The dollar that promises to be a dollar



Start with the clearest example of a bank that is not a bank.

A money market fund pools money from investors and buys short-term, high-quality debt: Treasury bills, commercial paper, repurchase agreements. It aims to return your money on demand, in full. In the United States these funds held about seven point one trillion dollars in net assets as of November 2024.

For decades many of these funds maintained a stable share price of one dollar. Put in a dollar, take out a dollar, collect interest along the way. That stability was a convention, not a guarantee. The underlying assets moved in value like any others; the fund rounded the difference away.

This creates a specific, well-understood danger. If the assets fall enough that the fund cannot honour a dollar, the investors who redeem first get their full dollar. The ones who wait absorb the loss. That is a first-mover advantage, and it is the same incentive that produces a bank run, with none of the machinery built to stop one.

There is no deposit insurance. There is no capital buffer sized to absorb losses. There is, in normal times, no access to the central bank.

Money market funds are part of a wider category that supervisors call runnable money-like instruments — things that feel like cash to whoever holds them but are claims on assets that can fall in value. Including money market funds, securities lending, commercial paper and repo, that category totalled around twenty-one trillion dollars in the United States in 2023.

Twenty-one trillion dollars of money that behaves like cash right up until the moment it does not.

6. Repo: borrowing against securities



The second building block is less familiar and more important.

A repurchase agreement, or repo, is a sale with a promise to buy back. A firm holding government bonds sells them today for cash and agrees to repurchase them tomorrow at a slightly higher price. Economically it is a secured loan. The bonds are collateral, the price difference is interest, and the whole thing can be done overnight.

Repo is the plumbing of modern finance. It lets institutions with securities raise cash quickly, and institutions with cash lend it safely. Trillions move through it daily.

Two features make it fragile.

The first is the haircut. A lender will not advance the full market value of the collateral; it lends slightly less, keeping a margin against a fall in price. In calm conditions a haircut on government bonds might be a fraction of one per cent. If the lender becomes nervous, the haircut rises. A borrower who could raise ninety-nine pounds against a hundred pounds of bonds might suddenly raise only ninety-five. Nothing has defaulted. The borrower simply has to find the difference, immediately, usually by selling something.

The second is that repo is almost always short-term. The loan must be rolled over constantly. A lender who declines to roll is not calling in a defaulted loan; it is simply declining to lend again. There is no negotiation and no notice.

Put those together and you have a funding model that can withdraw in a day, and that tightens precisely when markets are falling. The Bank of England's system-wide exercise, published in November 2024, found exactly this: haircuts doubled within days on new or rolled trades, and more than a third of fund managers who expected additional repo access would have been refused by every participating bank.

Not refused because they were in trouble. Refused because everyone was.

7. Securitisation and the chain



The third block is how loans became securities.

Securitisation takes a pool of loans — mortgages, car finance, credit-card balances — and bundles them into a vehicle that issues bonds backed by the payments. The bonds are carved into tranches. The senior tranche is paid first and carries the least risk. Junior tranches absorb losses first and pay more.

There is a genuine economic argument for this. It spreads risk beyond the originating lender and lets investors choose their exposure. Done carefully, it works.

The version built before 2007 was not careful. Structures were layered: securities backed by other securities, and then securities backed by those. Each layer was rated by agencies paid by the issuers. Each layer assumed that house prices across different American regions would not fall together, because historically they had not.

The critical piece was the funding. Vehicles holding these long-dated securities funded themselves with asset-backed commercial paper, typically maturing in under ninety days. That is a bank's maturity mismatch, rebuilt precisely, outside the perimeter, with no deposit insurance, no capital requirement and no central bank behind it.

The sponsoring banks often provided liquidity backstops to these vehicles, promising to step in if the commercial paper could not be rolled. Those promises sat off balance sheet and attracted little capital. On paper the risk had been sold. In practice a great deal of it had not moved at all.

The whole structure rested on one assumption: that short-term lenders would always roll. When they stopped, everything above them stopped with them.

8. 2007: when the paper stopped rolling



The first crack did not appear in a bank. It appeared in the funding market that everyone had assumed was boring.

Through the summer of 2007, buyers of asset-backed commercial paper began to look properly at what sat behind the paper they were holding. They found American mortgages of uncertain quality, inside structures they could not easily analyse, rated by agencies whose models were built on an assumption about house prices that was starting to look wrong.

Their response was not dramatic. They simply declined to buy more. Money market funds and corporate treasurers, whose entire mandate was safety, moved to government paper instead. There was no announcement and no panic. The buyers just stopped showing up.

For the vehicles, this was fatal. They held long-dated assets funded by paper that had to be replaced every few weeks. If nobody bought the new paper, they had two choices: sell assets into a market where everyone else was selling the same thing, or draw on the liquidity backstop from the sponsoring bank.

They did both. Which meant the risk that had supposedly been distributed to investors came straight back onto bank balance sheets, at the worst possible moment, in size, and largely unannounced.

This is the pattern worth remembering, because it repeats. The shadow banking system does not usually fail on its own and stay contained. It fails by transmitting its problem back to the regulated banks that sponsored it, lent to it, or promised to support it.

Risk that has been moved off a balance sheet has not necessarily been removed from it. It has been moved somewhere it is harder to see, until the moment it comes back.

9. September 2008: breaking the buck



The following year the same mechanism reached the part of the system that everyone genuinely believed was safe.

On the fifteenth of September 2008, Lehman Brothers filed for bankruptcy. Among the holders of Lehman's short-term debt was the Reserve Primary Fund, one of the oldest money market funds in the United States.

The next day, the sixteenth of September, the fund wrote off its Lehman holdings and its share price fell from one dollar to ninety-seven cents. In the language of the industry, it broke the buck.

Three cents. On a product most investors had filed mentally under cash.

What followed demonstrated exactly the incentive described earlier. Investors across the sector — not only in that fund — understood that if a fund could not honour a dollar, the people who redeemed first would be paid in full. Within days, redemptions from money market funds exceeded two hundred and fifty billion dollars.

This was a bank run. It had no queues outside branches and no photographs, but it had every economic feature of one: a promise of par value, an asset that could not honour it, and a first-mover advantage that made running rational for every individual holder even as it destroyed the system for all of them.

Because money market funds were major buyers of commercial paper, the run struck directly at how large companies fund payroll and inventory. A crisis that began in American housing arrived, within days, at the working capital of firms with nothing to do with mortgages.

The United States Treasury guaranteed money market fund balances, without prior congressional authorisation — a step Congress addressed afterwards in the Emergency Economic Stabilization Act. The Federal Reserve opened emergency facilities for money market funds and commercial paper under its unusual and exigent circumstances powers.

The safety net was extended, in an emergency, to institutions that had never paid into it.

10. What the crisis actually taught



It is tempting to summarise 2008 as a story about greed, or bad mortgages, or complex derivatives. Those were present. They are not the structural lesson.

The structural lesson is narrower and more useful. A financial system can rebuild the exact fragility of a bank outside the rules written for banks, and it can do so in plain sight, using instruments everyone can read about, without anyone breaking the law.

Every ingredient of a classic banking panic was present. Short-term funding against long-term assets. A promise of liquidity that could not be honoured simultaneously. Leverage that turned modest asset falls into wiped-out equity. Opacity that meant nobody could tell which counterparty was safe, so everybody treated all of them as suspect.

What was missing was everything built over a century to contain those features. No deposit insurance. No capital requirement calibrated to the risk. No supervision of the maturity mismatch. No lender of last resort — until one was improvised.

And there is a second lesson, less often stated. The improvisation worked. The facilities stopped the run. But in stopping it, the authorities established that institutions outside the safety net would be caught by it anyway when the alternative was systemic collapse.

That creates a problem that has not gone away. If the backstop arrives in a crisis regardless, then the discipline that was supposed to substitute for regulation — the risk of failure — is weaker than it

appears. The sector gets the upside of operating outside the bargain, and, in the worst moments, some of the protection of being inside it.

11. The rules that followed



The response was substantial, and it was mostly aimed at banks.

Capital requirements rose sharply and became more sensitive to risk. Banks were required to hold buffers of genuinely liquid assets and to fund long-term assets more stably. Off-balance-sheet vehicles were pulled back on. Large banks were subjected to regular stress testing. Standardised derivatives were pushed through central counterparties so that exposures were collateralised and visible.

For money market funds specifically, rules changed too. Some categories moved to floating share prices, making explicit that the value could move. Liquidity requirements were introduced, and tools such as fees and redemption gates were added so a fund under pressure had options other than selling into a falling market.

Much of this worked. The banking system entered the next serious stress with materially more capital and liquidity than it had in 2007.

But the reform programme had a structural feature worth naming. It was organised around institutions, and most intensively around the institutions that had needed rescuing. The rules attached to entities, not to activities.

If you tighten the rules on one type of institution while leaving the underlying economic demand unchanged — for leverage, for maturity transformation, for yield — the activity does not stop. It relocates.

Which is precisely what the data shows. Since the crisis, the non-bank sector has grown faster than the banking sector almost every year. In 2024 it grew at twice the rate. The reforms made the banking system safer. They did not make the financial system smaller, and they did not remove the demand that had built the shadow system in the first place.

12. March 2020: the dash for cash



The second test arrived thirteen years later, from a direction nobody's model had prioritised.

In March 2020, as the scale of the pandemic became clear, investors across the world tried to convert assets into cash simultaneously. This is sometimes described as a flight to quality, but that is not quite what happened. Investors sold the assets they could sell, which included assets normally considered the safest available.

Prime money market funds – those holding corporate rather than government debt – faced heavy redemptions. Across the sector, funds saw outflows that the Bank of England later measured at around eleven per cent. Government money market funds received inflows at the same time. Investors were not leaving the sector; they were sprinting from the part of it exposed to corporate credit into the part backed by the state.

Open-ended funds holding corporate bonds faced the same pressure from the same direction. These funds offer daily redemption while holding instruments that can take days to sell in size. When redemptions arrive faster than assets can be sold, the manager must either sell the most liquid holdings first – which concentrates the remaining fund in the least liquid assets, worsening the position of those who stay – or sell everything into a falling market.

Central banks intervened again, at greater scale and greater speed than in 2008, buying assets and standing behind short-term funding markets.

The system did not collapse. But the shape of the episode was instructive. No institution had behaved fraudulently. No single firm had taken a catastrophic bet. The instability came from many rational participants doing the same sensible thing at the same moment, and from a structural promise — daily liquidity on assets that are not daily liquid — that cannot be honoured collectively.

That promise had not been fixed. It had simply not been tested since the last rescue.

13. Leverage without a balance sheet



To understand the next chapter, you need one more mechanism: how a fund borrows without obviously borrowing.

The simple form is margin lending. A hedge fund holds securities with a prime broker, which lends against them. The fund posts collateral. If prices fall, the broker calls for more. If the fund cannot post, positions are liquidated. Hedge fund leverage varies enormously by strategy, from roughly twice net asset value to more than forty times.

The more important form is synthetic. Derivatives give exposure to an asset's price movement without owning it. A fund can gain the economic effect of a very large position while posting only margin. The exposure does not appear as a loan on the balance sheet, because it is not one.

And then there is repo chaining, where the same security supports borrowing more than once as it moves through the system. Regulators have documented how far this can go. In December 2022, hedge funds' Treasury repo positions implied leverage of around fifty-six to one on five hundred and fifty-three billion dollars of borrowing. Analysts noted that applying even a two per cent haircut would have reduced that to roughly twenty-five to one.

Leverage of fifty-six to one means a movement of under two per cent in the underlying asset is enough to erase the equity behind the position.

The Federal Reserve's Financial Stability Report of May 2026 found that hedge fund gross notional leverage — exposure divided by net asset value — remained near all-time high levels as of the third

quarter of 2025, with balance-sheet leverage at the fifteen largest funds rising slightly.

This is the crucial difference between leverage inside and outside the banking system. A bank's leverage is capped by regulation and reported to a supervisor. A fund's leverage is limited by what its counterparties will extend, which is generous in calm markets and withdrawn in falling ones.

The constraint is not a rule. It is a mood.

14. The Treasury basis trade



One strategy deserves particular attention, because it links the most leveraged corner of the non-bank sector to the market that anchors the global financial system.

The cash-futures basis trade exploits a small, persistent price gap between a government bond and the futures contract on that bond. The gap is tiny – often a few hundredths of a per cent. To make it a business, you must repeat it at enormous scale, funded almost entirely with borrowed money, usually through repo.

In normal conditions it is a genuinely useful trade. It keeps the cash and futures markets tied together and provides liquidity to both.

The risk is what happens when funding tightens or prices move. Because the position is leveraged so heavily, small adverse moves generate large margin calls. Meeting them means selling government bonds. If many funds hold the same position – and they do, because the opportunity is visible to everyone – they sell at the same time.

The result is forced selling in the market that every other asset is priced against, and that every institution holds precisely because it is supposed to be the thing you can always sell.

The Federal Reserve's May 2026 report noted that a decrease in the cash-futures basis trade had been largely offset by growth in other relative-value trades. The specific strategy shifts. The underlying structure – heavy leverage, crowded positioning, short-term funding, government bond collateral – does not.

It is worth being careful here about what is known and what is not. Regulators have published estimates of hedge fund Treasury exposures and have repeatedly flagged concentration and leverage as a concern. They have not published a precise, current figure for the size of the basis trade, and this film will not invent one. What is documented is that leverage sits near historic highs and that the positions are concentrated among a small number of very large funds.

15. September 2022: the British lesson



The clearest demonstration of non-bank fragility in recent memory happened not in a hedge fund but in the pension system of a G7 economy.

British defined-benefit pension schemes promise members an income decades into the future. The value of that promise moves with long-term interest rates. To protect against rate changes, schemes adopted liability-driven investment — using derivatives and repo to hedge interest-rate exposure without tying up all their capital in government bonds.

This was prudent in intent. It let schemes hedge the risk that mattered while keeping money invested in growth assets. It also meant the hedges were leveraged, and leveraged positions require collateral.

In late September 2022, gilt yields rose very sharply following the government's fiscal announcement. Rising yields meant losses on the leveraged hedges, which meant margin calls. To meet them, schemes and their LDI managers sold the most liquid asset they held.

Gilts. The same asset whose falling price had caused the margin call.

That is a self-reinforcing loop, and it moved at a speed the participants could not match. The Bank of England later recorded that non-banks sold around thirty-eight billion pounds of gilts over three weeks. The Bank intervened with temporary purchases of long-dated gilts, explicitly on financial stability grounds.

Several features deserve emphasis. Nobody had committed fraud. The strategy had been encouraged by the regulatory and accounting framework. The institutions involved were pension funds — among the most conservative, most heavily supervised investors in the system. And the asset at the centre was British government debt.

If a leveraged loop can form there, it can form anywhere. The lesson was not about recklessness. It was that a hedging strategy which is sound for one institution can be destabilising when every institution holds it and all must post collateral on the same day.

16. Private credit: the newest layer



The most recent growth has been in lending that never touches a public market at all.

Private credit funds lend directly to companies, mostly mid-sized businesses, often those owned by private equity. They compete with the syndicated loan market and with banks. The International Monetary Fund estimated the market at around two trillion dollars in April 2024, and flagged it as fast-growing and warranting closer watch.

The structural case for it is reasonable. The funds are typically closed-ended, so investors cannot demand their money back on a day's notice. That removes the run risk that defines money market funds and open-ended bond funds. Capital is locked up, which matches illiquid loans to patient money. In that specific respect private credit is more stable than the vehicles that failed in 2008 and wobbled in 2020.

The concerns lie elsewhere.

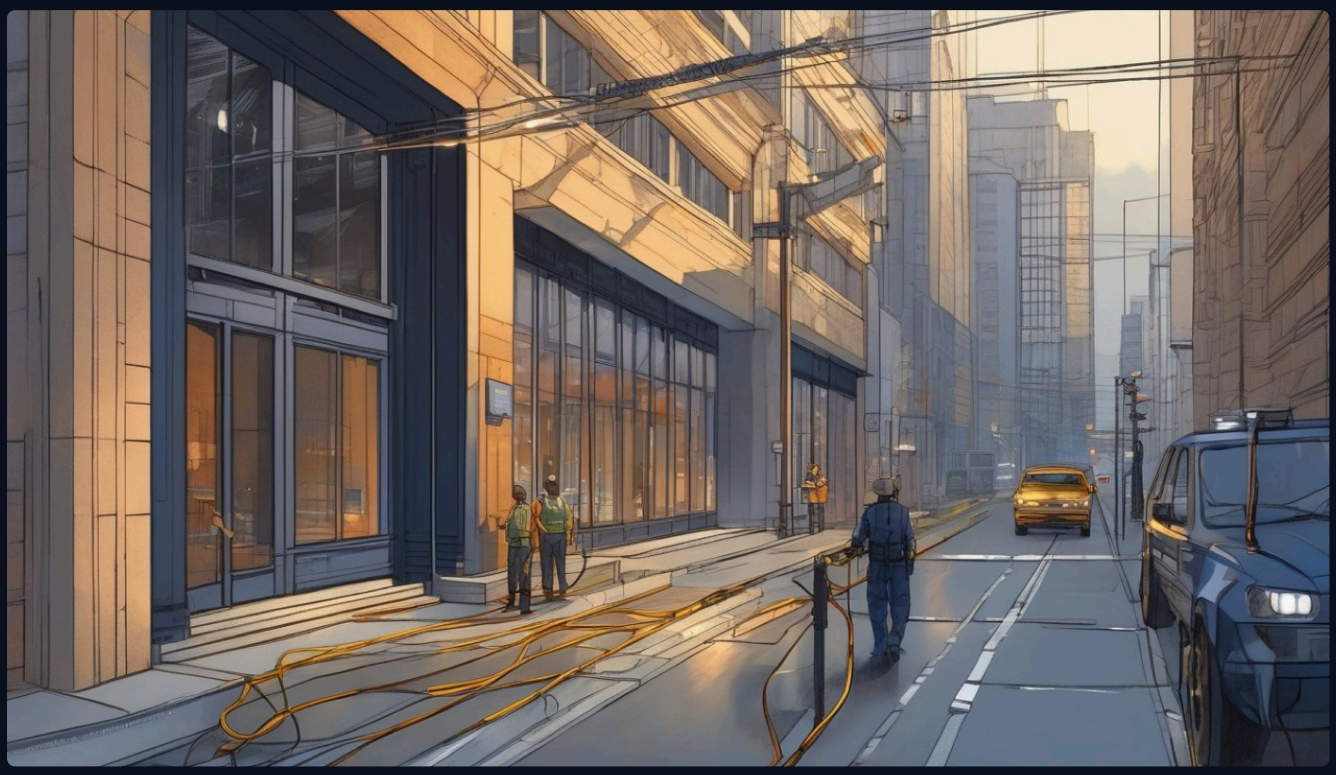
Valuation is the first. These loans do not trade, so their value is estimated rather than observed. In a downturn, marks may move more slowly than the underlying reality, which means the reported health of the sector may lag the actual health of the borrowers.

Opacity is the second. This is the sector the Financial Stability Board says it cannot measure precisely because of severe limitations in the data.

The third is the connection back to banks. Banks lend to private credit funds, provide them with facilities, and increasingly hold exposure to them. The Federal Reserve reported that bank credit commitments to non-bank financial institutions stood at two point six trillion dollars in the fourth quarter of 2025, with private equity, business development companies and private credit accounting for roughly a quarter of that.

So the honest assessment is mixed, and should be stated as mixed. Private credit is better structured than the vehicles that broke in 2008 in the one dimension that matters most — it is much harder to run on. It is also less measurable, less frequently priced, and more entangled with the banking system than its advocates usually emphasise. It has not yet been through a serious default cycle at its present size.

17. The bank-non-bank nexus



That last point generalises, and it is the single most important structural fact in this story.

The shadow banking system is not separate from the banking system. It is wired into it.

Banks lend to non-banks. Banks act as prime brokers, financing hedge fund positions — prime broker lending to hedge funds stood at around two point three trillion dollars as of June 2024. Banks are the dealers who make markets that funds rely on to sell. Banks provide the repo financing that leveraged strategies depend on. Banks are counterparties on the derivatives that create synthetic leverage. And banks frequently sponsor, seed or own the asset managers involved.

This matters because it defeats the intuitive comfort of the 2008 reforms. If you make banks strong and let non-banks take the risk, you might think the system is safer overall. But if the non-banks fail while owing banks trillions, the strength of the banks is exactly what is being tested.

There is a further complication, visible in the 2024 Bank of England exercise. Banks are not only exposed to non-banks; they are also the shock absorber non-banks are counting on. When funds need to sell, someone must buy, and in stress that someone is usually a dealer bank warehousing risk on its own balance sheet.

The exercise found that appetite is thin and concentrated. In the sterling corporate bond market, eighty-five per cent of the warehousing capacity sat with five banks, and total appetite was around four billion pounds against typical daily trading volumes of about one billion.

Which means a market that appears to have depth has depth supplied by a handful of firms whose willingness to provide it is discretionary, and lowest precisely when it is needed most.

18. Testing the system deliberately



Rather than wait for the next crisis to reveal these dynamics, the Bank of England ran one on paper.

Its system-wide exploratory scenario, published in November 2024, was the first exercise of its kind anywhere. Around fifty firms took part — banks, insurers, pension schemes, hedge funds and asset managers — and were asked how they would respond to a severe but plausible shock: gilt yields up one hundred and fifteen basis points, corporate bond spreads widening one hundred and thirty, and a mid-sized hedge fund defaulting partway through.

The headline finding was that non-bank institutions faced roughly ninety-four billion pounds in margin calls, of which around eighty-five per cent was variation margin. Pension schemes and LDI funds took the largest losses on leveraged positions and made about ninety-two billion pounds of margin payments to banks. LDI funds sought sixteen and a half billion pounds of fresh capital from the pension schemes behind them. Open-ended funds sold around seven billion pounds of corporate bonds to meet redemptions.

Some of the news was genuinely good. Post-2022 reforms meant LDI funds held buffers able to withstand a two hundred and fifty basis point yield move. Money market funds absorbed redemptions of eight to nine per cent, against the roughly eleven per cent the sector experienced in March 2020. Non-banks sold about four point seven billion pounds of gilts, against thirty-eight billion over three weeks in 2022.

The gilt market kept functioning. But the Bank's own conclusion was that the outcome was finely balanced: an additional half a billion to one and a half billion pounds of sales in medium and long-

dated gilts would have exhausted the banks' remaining capacity to buy.

The corporate bond market did worse. The Bank described a jump to illiquidity — selling pressure that outran buying capacity, with prices falling sharply.

And one detail is worth holding onto. Clearing members' estimates of the initial margin they would face averaged nine times higher than the projections of the central counterparties themselves. Firms preparing for the same event, under the same rules, disagreed about their obligations by roughly an order of magnitude.

19. What would actually make it safer



If the problem is structural, the remedies have to be structural too. Broadly, four approaches are argued for, and each has a real cost.

The first is to regulate by activity rather than by entity. If something performs maturity transformation using leverage, apply comparable rules regardless of the legal wrapper. This directly addresses arbitrage. It is also genuinely hard to draft and harder still to coordinate across jurisdictions, since capital moves faster than treaties.

The second is to fix the liquidity promise. A fund that offers daily redemption while holding assets that take a week to sell is making a promise it cannot keep collectively. Remedies include matching redemption terms to asset liquidity, swing pricing so that redeeming investors bear their own transaction costs, and notice periods. The cost is convenience, and investors dislike it.

The third is to make margin and haircuts less pro-cyclical. Much of the damage in both 2020 and 2022 came from collateral demands spiking at the worst moment. Setting haircuts with a through-the-cycle floor, so they do not have to jump in stress, reduces the amplification. The cost is that borrowing is more expensive in calm periods, which is when nobody wants to pay it.

The fourth is to improve the data. Regulators cannot supervise what they cannot see, and the recurring admission in official reports is that visibility into leverage, interconnections and private markets remains incomplete.

There is a fifth option, rarely stated plainly: accept that the central bank will intervene again, and design for it — deciding in advance which institutions get access to liquidity support, and what they must accept in return.

That is uncomfortable, because it extends the safety net. But the alternative is not no safety net. The alternative is an unplanned safety net, improvised under pressure, as happened in 2008, in 2020 and in 2022.

20. The trillions you cannot see



Return to where this began. Two hundred and fifty-six point eight trillion dollars. Fifty-one per cent of global financial assets. Growing at twice the rate of the banks.

None of that is inherently alarming. A financial system where credit reaches businesses through many channels rather than one is arguably more robust, not less. When banks retrenched after 2008, non-bank lenders kept credit flowing to companies that would otherwise have been starved of it. Pension funds and insurers, the largest components of the measure, are exactly the long-horizon investors an economy should want.

The concern is narrower and should be stated narrowly. It is about the part of the sector that performs bank-like functions – promising liquidity it does not hold, borrowing short to lend long, using leverage that can be withdrawn overnight – without the accompanying protections, and while being deeply connected to the banks that do have them.

That part is measured at seventy-six point three trillion dollars, and it is growing faster than the rest.

Three things are documented rather than speculated. The activity has grown. The interconnection with banks has grown. And the official bodies charged with monitoring it continue to report that they cannot see all of it.

The question that closes this is not whether the shadow banking system will fail. It is narrower, and it has a testable answer. When the next shock comes, will the losses be absorbed by the investors who chose the risk, or transmitted back to the banks, the taxpayers and the central banks that never did?

In 2008 the answer was transmitted. In 2020 it was transmitted. In 2022, in Britain, it was transmitted.

The trillions are not hidden. Anyone can read the reports. They are simply large enough, fast enough and connected enough that the honest position is the one the regulators themselves take: the system is better defended than it was, and nobody can yet say it is defended enough.

Sources and credits

Primary sources

- Financial Stability Board, *Global Monitoring Report on Nonbank Financial Intermediation 2025* (published 16 December 2025, 2024 data) – $256.8tn, 51% of global financial assets, 9.4% growth, narrow measure $76.3tn, 29 jurisdictions.
- Bank of England, *System-Wide Exploratory Scenario final report* (29 November 2024) – GBP 94bn margin calls, GBP 92bn to banks, GBP 16.5bn LDI recapitalisation, GBP 4.7bn gilt sales against GBP 38bn in 2022, 8-9% MMF redemptions, five-bank corporate bond concentration.
- Congressional Research Service R48512, *Nonbank Financial Intermediation* – US NBFI $85.7tn (2023), MMFs $7.1tn (Nov 2024), $21tn runnable instruments, 56-to-1 Treasury repo leverage (Dec 2022), Reserve Primary Fund breaking the buck, 16 September 2008.
- Federal Reserve, *Financial Stability Report*, May 2026 – hedge fund gross notional leverage near record (Q3 2025), $2.6tn bank credit commitments to non-banks (Q4 2025).
- International Monetary Fund, *Fast-Growing $2 Trillion Private Credit Market Warrants Closer Watch* (April 2024).

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