



Dead Capital and the Divisibility Gap

A mechanism for mobilizing locked equity in ordinary real property. On why formal title made real property transferable without making it tradeable.

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Note

FROM THE AUTHOR

The system described here is mine. The operating layer ran under my own ownership, and the mechanism, market structure, and rulebook were built over seven years alongside a lending career that began in 2004.

AI assisted with the writing, structure, and arithmetic, and it earned its place. It exposed claims in earlier drafts that did not hold up. Those corrections remain in this paper because they belong there. The thesis, the mechanism, and any errors that remain are mine.

I also built a financial model to accompany this paper. It is not a substitute for the argument; it is a way to test it. Readers can change the assumptions, examine the financial structure, and see economics working in real time.

If I can be proven wrong, tell me. But if the idea holds, it could give property owners a real alternative to debt and create a new way to buy and sell real assets. A self-perpetuating system free of the barriers that limit access and liquidity in any market.

Abstract

ABSTRACT

Approximately \$11.7 trillion of tappable equity is held by 47.5 million U.S. mortgage holders, against \$18 trillion of total home equity, as of Q2 2026. Comparable sums are locked in small commercial property. This capital is not idle by choice. It is economically immobilized by a structural feature of real property

that has never been addressed: **there is no standard denomination.**

Ownership *can* be divided (a tenancy-in-common interest, a syndication, an LLC unit), and that is precisely why the problem is so durable. What division produces is a bespoke interest: priced by negotiation, sold to a buyer who must be searched for, interchangeable with nothing, and carrying governance entanglement into every subsequent transfer. **The owner divides one illiquid asset and receives two.** What has never existed is a standard unit, uniform, fungible, identically termed, which is the thing a market can actually be made in.

This paper advances the hypothesis that the absence of a standard denomination, rather than valuation, documentation, or demand, is the binding constraint on real estate liquidity, and that issuing ownership in uniform, fungible, continuously priced units mobilizes a measurable portion of that locked capital without adding leverage or transferring risk to anyone who has not accepted it. It does not claim that no value is created. No new claim on cash flow is manufactured, but the same claim is worth more in a form that can be sold on Tuesday, and §3.4 sets out the three sources of that difference and says which of them run out.

The central proposition is arithmetic and falsifiable: **the cost of selling a share of a property is its cap rate; the cost of borrowing against it is the loan rate. Partial sale dominates borrowing whenever the cap rate is below the borrowing rate,** and carries no payment, maturity, guarantee, or default. Second-lien volume reached an 18-year first-quarter high in Q1 2026: substantial demand for partial equity access, served entirely by debt, because no equity instrument exists.

This is not a fractional-ownership proposal, and it is not a tokenization proposal. That infrastructure already exists and works at scale, and has nonetheless failed to move real estate. Section 4 sets out the industry's own diagnosis: not technology, but the absence of a first buyer. Every prior venue built the exchange and waited. This paper answers that with a **posted, contractual standing bid:** a seller can transact from day one because an exit is guaranteed to exist, and the commitment retires when other buyers begin stepping inside that bid, which is not the committing party's decision to make.

Nor is this an investment product seeking buyers. The customer is the owner of the building. What is described is a refinancing instrument, an alternative to a second lien for someone who needs part of their equity and intends to keep the asset, which happens to be funded by buyers rather than by a lender. That distinction determines nearly every design decision that follows.

One parameter governs everything and nobody has measured it: the yield at which a frozen owner will actually transact. Second liens on this collateral clear daily at 12–22% and owners take them; the same owners decline partial sale priced at 12%, because at that yield the equity instrument has crossed to the wrong side of its own arithmetic. They transact at 4.5%. The venue therefore prices every listing twice: a cornerstone bid the seller will accept, an open-market leg the buyer requires, and **it is the blend, near 9%, that determines whether the transaction happens at all.** Section 3.3 states this as a theory and section 9 measures it.

I set out the mechanism, eleven numbered predictions it makes, the minimum experiment that would test them, and the conditions under which the hypothesis should be rejected.

Hypothesis

H1. A significant fraction of the equity in ordinary income-producing real property is economically dead, unable to circulate, for a single structural reason: **there is no standard denomination.** Ownership can be divided, but only into bespoke interests that must be individually negotiated and individually sold, which leaves each one as illiquid as the whole asset it came from.

H2. Issuing ownership in a standard denomination of uniform, fungible, continuously priced units converts a measurable portion of that dead capital into circulating capital, **and creates value in doing so, rather than merely relocating it.** The same claim on the same rent is worth more when it is liquid, divisible and continuously priced than when it is none of those things; and a venue in which participants hold several roles at once internalizes costs that conventional ownership leaves external. Neither source requires added leverage, nor transfers risk to any party who has not accepted it.

H3. Such a market cannot form spontaneously. It requires a contractual buyer of first resort in a specific form: **a posted standing bid, for a defined share of every new listing, at a stated yield, on demand, at issuance only, bounded by a cap and a term rather than by an index.** The commitment is to the bid, not to the fill, so it is priced, it tapers on evidence produced by third parties rather than by judgment, and it retires itself by ceasing to be exercised.

H1 is a claim about cause. H2 is a claim about effect. H3 is a claim about what is required to get from one to the other, and it is the claim most likely to be wrong.

H2 carries a corollary that §3.5 develops: the conversion is permanent. A loan against an indivisible asset moves capital for a term and returns the asset to exactly the state it was in. Dividing it changes the asset itself, and it does not change back, so the quantity that accumulates is a *stock* of divisible equity rather than a flow of transactions. If that is wrong, and divisibility somehow decays, the case for paying a one-time concession to establish it decays with it.

H3 carries a corollary that §3.3 develops and P7 tests: **the buyer of first resort is not only clearing the book, it is setting the price at which the seller is willing to appear at all**, and the share it must clear is therefore governed by how quickly the seller base seasons, which is an empirical quantity and not a design choice.

Background: dead capital, and the half of it that was never solved

Hernando de Soto's *The Mystery of Capital* (2000) identified roughly \$9.3 trillion of what he called dead capital: real property held by the poor in the developing world that could not function as capital because it lacked formal, transferable title. His diagnosis was that the asset was real but the **representation** was missing. Without a title system, a house is shelter but not collateral; it cannot be pledged, divided, traded, or used to raise anything.

The United States has the representational system de Soto prescribed. Title is formal, recorded, insured, and adjudicated. By his criteria, American real property should be fully live capital.

It is not.

The tappable equity number is \$11.7 trillion, and the reason it stays tappable rather than tapped is visible in the instruments people actually use. In Q1 2026, **54% of all home-equity extraction came through second liens**, the strongest first quarter in 18 years. Owners are reaching for equity in volume. They are reaching for it with debt, at today's rates, while holding first mortgages averaging 4.5%, because a cash-out refinance is, as ICE's own commentary puts it, *"an expensive way to access only part of the home's equity."*

So the American version of dead capital is not a documentation failure. **Formalization gave us perfectly transferable title to whole assets, and stopped there.** De Soto solved representation. Nobody solved denomination, and §2.3 sets out why that is a different claim from saying nobody solved divisibility, which would be false.

That is the gap this paper addresses, and it is not a developing-world problem or an edge case. It is the reason existing home sales have run at 4.2 million against a 5 million norm for three straight years, why the housing industry remains roughly 30% smaller than it was four years ago, and why mortgage rate lock-in alone is estimated to prevent 870,000 transactions in 2026. An owner who needs part of their equity must transact the whole asset or borrow. Those are the only two doors, and both are expensive for reasons that have nothing to do with the property.

2.2 · Why this does not depend on the market staying frozen

The strongest objection to everything that follows is a timing objection: the freeze described above is a condition, conditions pass, and a venue built for one will be obsolete when it does. It deserves a direct answer, because the answer is not that the freeze will persist.

Divisibility is useful in both directions, for opposite reasons.

In a frozen market (rates high, transactions suppressed, owners locked in), the constraint binds on the **sell** side. An owner who needs part of their equity must transact the whole asset or borrow against it, and both doors are expensive. Divisibility is an **exit**.

Suppose the freeze lifts the way freezes usually lift: the cost of money falls, transaction volume recovers, and prices rise to meet the cheaper financing. The lock-in problem dissolves. But the same policy that unfreezes the market inflates the asset, and the constraint reappears on the **buy** side: the median property is now further out of reach of the median household than it was, and ownership of real property remains what it has always been for that household, an all-or-nothing proposition answered with nothing. **Divisibility is then an entry:** a \$10 claim on a building is the only size at which an ordinary person can own real property at all.

So the two regimes the policy cycle alternates between are the two regimes in which an indivisible asset fails a different half of the population. **The mechanism is not a bet on which one we are in.** §3.2 establishes that the owner's refinancing and the buyer's asset are one transaction; this section is the same claim at the scale of the cycle rather than the trade. **The exit and the entry are not two uses of the instrument; they are one transaction, and the cycle decides which side of it is desperate.**

This is also why the venue’s anchor bid is fixed rather than indexed (§6). A mechanism whose usefulness is counter-cyclical should not have its central price set by the cycle.

2.3 · Divisibility is not the missing piece. Denomination is.

The argument above is easy to state imprecisely, and the imprecise version is wrong in a way a practitioner will catch immediately.

Real property is already divisible, and has been for centuries. An owner can sell a twenty percent tenancy-in-common interest this afternoon. They can syndicate, form an LLC and issue membership units, take a joint-venture partner, or sell a participation. None of this requires a new instrument, a new venue, or this paper. Any claim that ownership cannot be divided is simply false, and a reader who works in syndication will stop at that sentence and be right to.

What those structures produce is a **bespoke interest**, and a bespoke interest inherits every disability of the asset it came from:

- Its price is **negotiated**, not quoted. There is no bid.
- Its buyer must be **searched for**, one at a time, at the seller’s expense.
- It is **not interchangeable** with any other interest, so there is nothing for a book to be made of.
- It carries **governance entanglement** with identified co-owners into every subsequent transfer.

So the owner divided one illiquid asset and received two illiquid assets. The transaction cost of the second sale is no lower than the first. **Division without standardisation does not produce circulation; it produces smaller stranded claims.**

Three properties have to hold together, and only the first is present today:

		PRESENT IN ORDINARY REAL PROPERTY
Divisibility	ownership can be split at all	yes
Denomination	the parts come in one standard size, on identical terms	no
Fungibility	any part substitutes for any other without inspection	no

Denomination is what converts division into circulation. When every unit is identical, a buyer stops evaluating *this seller’s interest* and starts evaluating *the building*: the only question left is price, which is what an order book is for. Everything downstream of that depends on it: the continuous quote in §5, the marketability discount in §3.4, and the pro-rata liquidation the credit structure in §7 relies on.

This also sharpens the parallel in §2. De Soto’s insight was not that property in the developing world could not be owned; it was that it could not be owned in a **standard form**: title that reads the same in every parish, adjudicated the same way, recognisable to a stranger. Formalisation was a standardisation project.

Standard title made real property transferable. A standard denomination is what would make it tradeable.

The same idea, applied one level down, to the unit rather than the claim. That is the half that was never done, and it is the reason a century of perfect title records has left \$11.7 trillion sitting still.

3

The central proposition

Consider an owner of income property who needs to raise capital and wishes to retain the asset and its existing first mortgage. Two instruments are available: a second lien, or, if it existed, the sale of a fractional interest.

The comparison reduces to a single line:

Borrowing costs the owner the loan rate on the amount raised. Selling a share costs the owner the property’s cap rate on the amount raised. Whichever rate is lower is the cheaper instrument.

Worked on a \$500,000 property with a \$250,000 first mortgage at 4.50%, raising \$100,000, against a second lien at 8.50%:

PROPERTY CAP RATE	OWNER KEEPS: SECOND LIEN	OWNER KEEPS: SELL 20%	DIFFERENCE
5.00%	\$5,250	\$8,750	+\$3,500
6.00%	\$10,250	\$12,750	+\$2,500
7.00%	\$15,250	\$16,750	+\$1,500
8.00%	\$20,250	\$20,750	+\$500
9.00%	\$25,250	\$24,750	-\$500
10.00%	\$30,250	\$28,750	-\$1,500

The crossover sits exactly where the two rates meet. Below it, partial sale wins on cash flow alone.

And the obligations are not comparable. A second lien carries a fixed payment, a maturity, typically a personal guarantee, and a default. A sold partition carries none of those. The owner who sells 20% has a permanently smaller claim on a permanently smaller share of rent, and no further obligation of any kind. There is no scenario in which it comes due, no scenario in which it is called, and no scenario in which it takes the building.

So on a substantial and identifiable population of properties (every one whose cap rate sits below prevailing second-lien pricing), **the equity instrument is both cheaper and structurally safer for the owner, and it does not exist.** Owners are choosing the more expensive and more dangerous instrument because it is the only one on the shelf.

This is the proposition the rest of the paper is built to serve. It is arithmetic, it takes thirty seconds to check, and if it is wrong the paper fails immediately.

3.1 · The demand side of the same gap

The gap blocks capital as well as owners.

Institutional and family capital wants exposure to ordinary income property. The evidence is not a survey; it is that firms built operating companies to get it. The single-family rental sector exists because institutional capital cannot be deployed into \$300,000 assets one at a time: per-unit acquisition cost, diligence, and management overhead do not work below a certain deal size. The only available route was to build a platform, hire the staff, and aggregate by hand, and that route is open to perhaps a dozen firms.

Meanwhile the same 2026 that produced record commercial transaction volume (\$74.4 billion in July, the strongest month since 2005) produced it almost entirely at the top. Roughly \$34 billion was data centres; excluding them, activity rose about 1%. Deals over \$10 million crossed 50% of transaction value for the first time since 2022.

Supply that cannot divide, and demand that cannot land in small increments, are the same constraint observed from two directions. Neither party can resolve it alone, and no amount of rate relief resolves it either, because it is not a pricing problem.

3.2 · The two sides are one transaction

The demand is not only institutional, and this is the structural point on which the venue's durability rests.

An owner raising \$100,000 against a building does not merely receive capital. **They create \$100,000 of income-producing asset, secured by identified real property, in units small enough for an ordinary person to buy.** That is not a fortunate coincidence between two markets. It is a single transaction observed from either end: the owner's refinancing is the buyer's asset, and it cannot exist without them.

This matters because it is precisely what prior venues lacked. A platform that manufactures supply and then hunts for demand has two problems and no relationship between them. Here, each unit of demand satisfied produces the supply for the next, and each owner monetising a position becomes a candidate buyer of someone else's, which is the mechanism behind P5 rather than a metaphor for it.

It also identifies the population being served on the buy side, and it is larger than the institutions in §3.1. Home ownership has become inaccessible to a substantial cohort who nonetheless want exposure to real property and the income it produces. What the divisibility gap forecloses for them is not a mortgage; it is the ability to own a productive share of real property at all, at any size they can afford. **Ownership of real property has been an all-or-nothing proposition, and for a growing number of people the answer has been nothing.**

A necessary qualification. Serving that population is what the mechanism *makes possible*; it is not what the first version of the venue should attempt. Distribution to non-accredited buyers carries a regulatory path, and a per-issuer annual ceiling, that a venue with no operating history should not be attempting to clear at the same time as it is establishing whether §3's proposition is true at all. **The pilot in §9 is institutional and accredited. The broader distribution is a consequence of the mechanism working, not a precondition for testing it,** and any version of this proposal that reverses that order should be treated with suspicion.

3.3 · The price at which a frozen owner will actually transact

The table in §3 gives the crossover analytically. What it does not give is the shape of the owner's decision on either side of it, and that shape is the difference between a mechanism that works and one that does not.

The observation is practitioner evidence rather than survey data, and it should be weighed as such. Second liens on exactly this collateral clear every day at **12% to 22%**, and owners take them. Offered instead a partial sale of the same property priced at a 12% yield, the same owners decline, not at the margin, but as a strong majority. Offered a partial sale at 4.5%, they transact.

This is not irrational, and §3's arithmetic is why. At a 12% sale yield the equity instrument has crossed to the wrong side of its own crossover: the owner gives up more annual cash flow than a second lien at 8.5% would have cost them. The refusal is the table being obeyed, not ignored. **A frozen owner is not waiting for any price. They are waiting for a price inside the crossover, and 12% is not one.**

That has a direct consequence for how a listing must be priced, and it is the reason the cornerstone exists in the form it does. A listing does not clear at one yield; it clears at two. The cornerstone takes its share at a yield the owner will accept, the remainder clears at whatever the open market demands, and **the number the owner actually faces is the blend.** A 35% cornerstone at 4.5% alongside an open-market leg at 12% blends to **8.5%** where that leg takes 40% of the listing, back inside the crossover for a large population of properties, where neither leg alone would be. **The blend moves with how much of the listing is left unbought,** and §6 works through why that remainder is a design choice rather than a residual.

So the three yields do three different jobs, and conflating them is the most common way to misread this design:

	YIELD	WHOSE NUMBER IT IS	WHAT IT DOES
Cornerstone	4.50%	the seller's	the price of admission , what the cornerstone pays to bring a frozen owner to the table
Open market	~12%	the buyer's	the business, where the return on the position is actually earned
Blend	~9%	the transaction's	the impetus, the price at which the trade happens at all

*A note on terms, because one of them is overloaded. "Draw" in this paper always means a drawing of money: a borrower's advance under a lien, or a partner's advance under a facility. It is never used for the cornerstone bid. The cornerstone bid is the **price of admission**: the premium paid to be in the transaction at all.*

The cornerstone is a seller's subsidy funded by a buyer's concession. §6 prices it from the book's side, as an underwriting concession against the secondary. This section prices the same transfer from the owner's side, as the distance between the market's reservation yield and theirs. They are one payment described twice, and the design only holds if both descriptions are affordable at once.

The reservation yield is a theory, not a constant, and this is the part that must be tested. The claim above says owners will not sell into 12% *today*. It does not say they never will. An owner who has completed one partial sale, watched the partitions pay a monthly distribution, and understood that the proceeds bought something that pays rather than something that costs, is not the same counterparty who first walked in. The theory is that **the reservation yield widens with experience**: having sold once inside the crossover, an owner returns wanting more capital out, and accepts pricing they would have refused before, because they are now comparing it to an outcome they have lived rather than to an abstraction.

If that holds, the population selling into the open-market leg is not a different set of people. It is **the same people, one cycle later**. And the cornerstone then retires for two independent reasons rather than one: the concession compresses as payment history accrues (P2), *and* the sellers' reservation yield widens as the seller base seasons (P7). Either alone would taper the obligation; together they set the schedule.

How long that takes is the single largest unknown in this paper, and it is not resolvable from a model. It is a behavioural parameter: one full cycle of sale, distribution, and return, on a population that has never had the option, and nobody has measured it because the option has not existed. It could be two quarters or it could be four years, and the difference between those two numbers is the difference between a cornerstone commitment that is expensive and one that is untenable. **It is measurable in the pilot, cheaply, and §9 records it.**

3.4 · Where the value comes from

If H2 claims value is created rather than relocated, the claim has to name its sources and say which of them run out. There are three, and they are not equally well evidenced.

First: the marketability discount is real, measured, and captured, once. Valuation practice does not treat liquidity as a nicety. It prices it, as an explicit deduction. Restricted-stock studies (securities identical to freely traded shares in every respect except that they cannot be sold for a period) cluster around a **35% mean discount** across five decades of samples. Pre-IPO studies, comparing private transactions with the same company's subsequent public price, average nearer **50%**. The asset did not change in either case. Only its marketability did, and the market charged between a third and a half of the value for it.

Ordinary real property is more illiquid than restricted stock, not less: months to transact, a bespoke buyer for every asset, an appraisal in place of a price. **A partition that can be sold on Tuesday is a different instrument from a building that takes six months to sell, and the difference is not sentiment.** That difference is value created by the form, and it accrues to the owner who is currently paying it.

This source is bounded, and the bound should be stated plainly: the discount can only be removed once per asset. It is a step change, not a compounding one, and the magnitude in real property specifically is contested: the illiquidity premium literature in direct real estate is not settled, and a reader who wants to attack this paper could reasonably start here.

Second: continuous pricing produces information that did not previously exist. An annual appraisal is an opinion. A limit order book is a measurement, produced daily by people with money at risk. Information has value to every party downstream of it: the lender sizing an advance, the owner deciding whether to sell, the buyer deciding what to pay, the assessor, the insurer. **A market where collateral values are observed rather than estimated can lend against them more cheaply and more safely,** which is the entire basis of section 7.

This source is also bounded. Price discovery saturates: once the book is deep and continuous, more trading adds little further information.

Third: the venue internalizes costs that conventional ownership leaves external, and this one does not have a ceiling.

Ordinary real estate is a structure of adversarial relationships. The landlord and the tenant are counterparties. The owner and the lender are counterparties. The buyer and the seller meet once and never again. Each of those relationships carries a real and measurable cost: collections, vacancy, turnover, deferred maintenance, disputes, the monitoring and enforcement that adversarial positions require. **These costs are not a failure of the participants. They are a property of the arrangement.**

In the venue described here, those positions overlap by construction. A tenant who holds partitions in the building they live in is not purely the landlord's counterparty; some fraction of their interest is on the other side of the table. An owner who sells part of a position becomes a buyer of someone else's, so the buy side and the sell side are drawn from one population rather than two (this is P5, stated there as a depth mechanism and restated here as its cause). A borrower keeps their partitions and their distributions while borrowing against them, so the lender's interest and the borrower's remain pointed the same way. **Every participant holds more than one role, and the roles pull together rather than apart.**

The consequence is that the system's value is not the sum of its assets. A building whose occupants are also its owners produces a different net operating income from the same building whose occupants are not, and the difference is not sentiment either; it is the arithmetic of collections, turnover, and care. **Whatever raises the value of the whole raises**

the value of every share of it, and every participant holds shares. The incentive to improve the system is therefore distributed to everyone in it, which is not a property that conventional real estate ownership has at all.

This is the source that does not exhaust, because it is a function of participation rather than of the assets. The discount can be captured once per building; price discovery saturates; **but alignment compounds with every additional participant who holds more than one role.** That is the sense in which the claim is unbounded, and the sense in which it is not: it is not infinite, and it is not free. It is unbounded *in principle* because nothing in the mechanism caps it, and it will be bounded *in practice* by whatever the measured effect turns out to be, which nobody has measured, because the arrangement has not existed.

It is therefore the weakest-evidenced of the three and the most consequential if true. P8 states it so that it can fail.

3.5 · The stock, not the flow

§2 makes a claim about the scale of the problem: \$11.7 trillion tappable, held back by a structural feature rather than a price. A reader is entitled to ask what the mechanism in this paper would actually do about a number that size, and the honest answer has two halves: one of which is more modest than the framing invites, and one of which is the whole point.

The modest half. A single venue on the growth path modelled in the published model brings roughly \$31 billion of property onto the platform across six years. Against \$11.7 trillion that is **under three tenths of one percent.** No venue fixes an economy, and any paper claiming otherwise should be put down at that sentence. What a venue can do is establish whether the constraint identified in §3 is the binding one. If it is, the mechanism is replicable by people with more capital than the author, and the aggregate is their problem to solve rather than this paper's to promise.

The half that matters. What distinguishes this from a stimulus argument is that **the conversion is permanent and it accumulates.**

An owner who takes a second lien has moved capital for a while. The loan amortises, the lien is released, and the property returns to exactly the state it was in: indivisible, and dead again for the next owner who needs part of it. Nothing about the asset has changed. The same \$11.7 trillion is waiting to be borrowed against a second time, on the same terms, with the same friction.

An owner who sells partitions has changed the asset itself. Those partitions exist from that day forward. They trade, they can be pledged, they are priced daily, and **they never return to being indivisible.** The next owner of that building inherits a property that is already divisible. The conversion does not have to be paid for again.

So the right unit of account is not annual volume but **cumulative stock of divisible equity:** capital that has crossed from dead to live and stays there. Every year adds to it and no year subtracts. That is what §2's de Soto framing actually implies and what the original argument left unfinished: formalization was a one-time conversion of the *representation*, performed once per parcel, and it has held for a century. **Divisibility is the same kind of conversion performed on the same asset, and there is no reason to expect it to be less durable.**

Three consequences follow, and each is checkable rather than rhetorical.

The subsidy is amortised across the whole future, not the year it is paid. §6 develops this from the cornerstone's side: the concession is paid once per building and the resulting float is transactable forever. The same arithmetic that makes a single year look expensive makes the arrangement cheap.

The buy side is manufactured by the sell side. §3.2 states this as a property of one transaction. At the level of the stock it is the growth mechanism: each conversion produces both an owner with proceeds and an instrument for someone who could not previously own real property at any size. The pool of participants and the pool of assets grow from the same event, which is what P5 predicts and what every prior venue lacked.

And the effect is largest exactly where the problem is worst. The gap in §3 binds hardest on owners whose cap rate sits furthest below second-lien pricing: ordinary income property held by people without institutional access. Those are the same owners a frozen market traps most completely, and they are the population the aggregate number in §2 is mostly made of.

What this is not is a claim that mobilised equity is free money, or that velocity is a substitute for production. Nothing here creates a dollar of rent that did not exist. The claim is narrower and older than that: **capital that cannot move is worth less than capital that can, the difference is measurable (§3.4), and the American version of the problem has gone unaddressed because the missing piece was never representation.**

4

Why no such market exists

The absence of a venue for fractional real property is not an oversight. Several have been attempted, and the audience for this paper has watched them underperform. Any serious proposal has to account for that record before proposing another one.

The analog structures are not a counter-example either, and it is worth saying why before reaching the digital ones. Syndications, tenancy-in-common interests, LLC membership units and Delaware statutory trusts have all divided real property for decades, at scale, with mature law behind them. None produced a liquid market, and §2.3 explains why: they divide without standardising. A DST interest is not interchangeable with another DST interest; each is its own security with its own sponsor, its own terms and its own buyer to be found. **The correct reading of their history is not that fractional real property has been tried and failed. It is that denomination has never been tried at all.** If this paper is right, that is the variable nobody moved.

The infrastructure is not the obstacle. Tokenized real-world assets reached **\$24 billion by February 2026**, up 266% in 2025. Custody, transfer, registry, and settlement are solved and in production.

Yet as one 2026 industry review states, tokenization has proved far more effective at *"digitizing already liquid or low-risk assets (like US treasuries and MMFs) than at unlocking liquidity for inherently illiquid ones (like real estate or fine art)."* Real estate tokens specifically exhibit *"low trading volumes, long holding periods and limited investor participation."*

The named obstacle, second on the industry's own list:

"Buy-side participation gaps — without a sufficiently broad and active investor base, secondary markets struggle."

That is the cold-start problem, in the industry's words. Every prior venue built the exchange and waited. **The unsolved problem was never the technology. It was who buys first.**

A market cannot bootstrap its own demand: a seller will not list into a venue with no bids, and a buyer will not fund an account for a venue with no listings. This is a structural property of new venues, not a marketing failure, and it has been solved before in other asset classes by the same method: contracting for the bid until the market becomes its own. H3 asserts that this is necessary here. Section 6 sets out the form it should take.

5

The instrument

A property enters the system **free and clear** (no mortgage, no prior lien), held by a single-purpose LLC. Ownership divides into uniform partitions of \$10, each an identical, fungible claim on a pro-rata share of net rent.

Three properties are load-bearing.

Fungibility is immediate and permanent. From minting, every partition of a building is identical to every other. No classes, no seniority, no side letters. Whatever an early buyer paid, the instrument they hold is the instrument everyone holds. This is a constraint rather than a feature: it forecloses several otherwise convenient structures, including property-level debt, and it is what makes a continuous market possible at all.

Price is continuous and observable. Partitions trade on a limit order book quoted in yield. There is a bid, an ask, and a last print at all times. This is the largest departure from conventional practice, where an asset's value is an opinion refreshed annually by an appraiser. Here it is a number produced daily by people with money at risk.

There is always a bid at issuance. An owner bringing a property to the venue can transact against the cornerstone's posted quote for up to its contracted share, from the first day. This is the property that distinguishes the venue from every prior attempt, and it is not a feature of the technology; it is a contract. A market where the bid is *hoped for* is the cold-start problem; a market where the bid is *guaranteed* is a market.

The venue collects the rent. Operating expenses and reserves settle before a dollar reaches a holder. A collection shortfall lands on distributions, not on the building's solvency. This is what makes the credit structure in section 7 possible, and it is only available because the venue is also the collection system.

The cornerstone, and why it must retire

At launch there are no bids, so the venue contracts for them.

A cornerstone partner commits to clear a defined share of every new listing at a yield below what the open market will pay. Yield and price are reciprocal, so accepting a lower yield means paying a higher price. The cornerstone deliberately overpays, and that premium is what allows the remainder of the listing to clear.

This should be named accurately: it is an **underwriting concession**, not an investment. It is the same economics as an underwriter taking unsold stock at the offer price when the market clears below it. The cornerstone's income is unaffected, since it earns its yield on what it holds, but because partitions are fungible from day one, the premium marks against the secondary book immediately. That belongs in cost of goods sold, not in the return line.

Two consequences follow, and they are the quantitative heart of the design.

The concession must be paid for, and the arithmetic is tight. A cornerstone clearing 35% of each listing at 4.5% against an 8% secondary requires the open-market portion to price roughly **188 basis points wide of the secondary** to break even across the two, **but only if the open-market leg absorbs the entire remainder of the listing**. That is the arithmetic of a venue with no float in it, and §2 argues the remainder is the venue. Leave 25% of each listing to other holders and the same break-even needs **306 basis points**; leave 30% and it needs 350. The concession the market must bear is therefore not a property of the cornerstone alone. **It is set jointly by the cornerstone's share and by how much float the design refuses to absorb**, and the second of those is the more consequential choice. That is a plausible new-issue concession, near the neighbourhood of an IPO discount. But it is not a free parameter: the cornerstone's share and yield jointly determine the minimum the market must be willing to pay:

CORNERSTONE SHARE	AT 4.0%	AT 4.5%	AT 5.5%	AT 7.0%
20%	100 bps	87 bps	63 bps	25 bps
25%	133 bps	117 bps	83 bps	33 bps
35%	215 bps	188 bps	135 bps	54 bps
50%	400 bps	350 bps	250 bps	100 bps

A 50% cornerstone at 4% requires 400 bps. No market pays that. The design is bounded from the outset, and this table is where the argument about sizing belongs.

The commitment is a standing bid at issuance, and that is what makes it retire itself.

The cornerstone is not a promise to buy at a price the market has set. It is a **posted, contractual bid: up to a defined share of every new listing, at a stated yield, on demand**. Nobody else is bidding at that level in year one, and that is the entire reason it has to be contracted rather than hoped for. The cornerstone is not matching a market price; it is producing the first one.

The bid is deliberately not indexed to anything outside the venue, and that is a design choice rather than an oversight.

The obvious way to protect a cornerstone against a rate shock is to tie its bid to a benchmark: the ten-year Treasury, say, reset quarterly. It is the wrong instrument here, for two reasons.

The first is that it defeats the purpose. The bid exists to move a frozen owner, and the level that does so is an empirical fact about that owner rather than a spread over anything. At a ten-year of 5.00%, where it stood in September 2026, an indexed bid would post at 5.00%, and an owner who transacts at 4.50% and declines at 5.00% is simply not served. **A concession that floats with the cost of money is not a concession; it is a market bid wearing one's coat.**

The second is that it imports precisely the volatility the venue exists to escape. A venue whose anchor bid moves with the Federal Reserve has an internal price that is a derivative of an external policy rate. **What is being built here is a market with its own price discovery, and an anchor that is a constant is what lets the book around it be a variable.**

The cornerstone's protection is therefore bounded exposure, not a bounded price. Three clauses, none of which touch the bid:

A cap. Up to a defined share of each listing, to a stated maximum per year. The cornerstone's commitment is bounded in dollars whatever the market does.

A term. The obligation runs for a defined number of years and is not evergreen. §7.1 sets out what the cornerstone owns by the end of it.

A dislocation clause. The bid suspends or resets only on a defined move in the cost of money: several hundred basis points from signing, not a quarterly drift. This is a circuit breaker, not an index: it does not fire in an ordinary year, so the venue operates independently day to day and the cornerstone is not underwriting a once-in-a-decade rate event at a fixed price.

Bounding the exposure rather than the price is what keeps the guarantee worth something to a seller. **A price that can move is an option the cornerstone holds; a quantity that cannot be exceeded is a risk it has sized.** Only the second is a commitment.

The commitment stops at issuance, and the reason is not squeamishness about cost. Price and yield are reciprocal, so a standing bid at 4.5% on partitions already trading at 11% is a price 2.4 times the market. Extended to the secondary, it is not a subsidy but an **arbitrage**: any participant buys at the book and sells into the cornerstone's quote for an instant hundred percent or more, repeatedly, in whatever size the cornerstone's balance sheet will bear. The commitment would be unbounded, and the counterparties it paid would be the ones who needed no help at all.

The distinction is the same one securities underwriting has always drawn. **The concession is paid at issuance, to the issuer, because that is what makes the issue clear. Market-making afterwards happens at the market.** A cornerstone that confuses the two is not being generous; it is writing a free option against itself, and §3's entire justification, that the subsidy is what brings a frozen owner to the table, applies to the owner listing the property and to nobody downstream of them.

What the commitment does **not** guarantee is the fill.

As the venue matures, another buyer eventually bids inside the cornerstone, 4.25% against a posted 4.50%, and takes the trade. The cornerstone's quote does not move and does not need to be renegotiated. **It simply stops being hit.** The share it clears falls as a direct consequence of other people wanting the paper, which is the only evidence that matters:

The bid is fixed. The fill rate is the taper.

Note what the fixed bid does against a venue that discovers its own prices. **The concession is the distance between the posted bid and what partitions actually trade at on the book**, so as the book tightens, that distance closes on its own, and when the book reaches the bid the concession is zero. The taper is measured entirely in the venue's own units. It needs no external index because the internal price is the index.

This is a materially stronger construction than a negotiated step-down, and it is worth being explicit about why. A scheduled taper requires someone to judge that the market has matured, and the party best placed to judge it is the party with the least interest in the answer. A taper by fill rate requires no judgment at all: **the obligation retires by ceasing to be exercised**, on evidence produced by third parties acting in their own interest. There is no date, no renegotiation, and nothing for the cornerstone to stall.

It also identifies the retirement condition precisely. The cornerstone's role ends **when its posted bid stops being hit**, which is exactly when the venue no longer needs a subsidy. At that point what remains on its balance sheet is a seasoned portfolio and a loan book, and the role has converted rather than ended, which is §7.1.

The subsidy is paid once per building, against a benefit that never expires.

A cornerstone reading a single year's arithmetic sees only the cost: it pays a premium at every mint and buys at the market everywhere else, so the listings it subsidises are the *expensive* half of its book. That reading is correct and incomplete.

A property, once minted, is on the venue permanently. Its partitions enter the float and stay there, available to be bought at the market, in every year that follows, with no concession attached. **The concession is a one-time payment that permanently enlarges the pool the cornerstone will transact in for the rest of its life.** What it is buying at issuance is not the year's yield; it is the existence of the secondary market it intends to operate in.

This is the same shape as §7.1 and worth naming as a general property of the design: **each of the cornerstone's costs manufactures one of its later businesses.** The concession builds the float. The taper builds the loan book. A partner who underwrites either on a single-year view will decline both, and will be arithmetically right about the year and wrong about the arrangement.

A note on the concession, since it is the same payment seen from the other side. A new-issue concession compensates for committing size without price discovery into an asset with no payment history. Both decay: price discovery arrives with the order book, payment history accrues month by month, and a property with twenty-four months of proven collections is a different instrument from the same property on day one. That decay is *why* competing bids appear. It is the cause; the falling fill rate is the observable effect.

6.1 · Why the cornerstone must be equity-heavy at the start

The cornerstone's capital structure is not a detail of the partner's treasury. It follows from §3.3, and getting it wrong is the most likely way a well-capitalised partner fails at this role.

The cornerstone slice cannot be financed. A 4.5% asset funded on a facility at 7% is negative carry by 250 basis points before a single expense. Run in the model with the open-market leg switched off entirely (cornerstone only, 35% at 4.5%, financed at 2:1), the first three years return **-16.8%, -12.4% and -15.5%** on the partner's own capital. That is not a bad year. It is a structure that cannot exist.

Switch the open-market leg back on at 40% of each listing and the same three years return **+8.4%, +9.8% and +7.3%**, on blended entry yields of 8.50%, 8.27% and 8.06% against the same 7% facility. Nothing else changed, and **25% of every listing is still left to other holders** in all three years.

These are single-digit returns and they should be. At a concession inside the range P1 predicts, a 35% cornerstone buys at a blend wider than the facility rate but tighter than the secondary book, so the partner is paid to *hold*, and loses money on anything it *sells*. Year one is a holding year. The model says so in its own words: the carry is not the problem, the turning is. **A reader who expected the flywheel to produce a large number in year one has misread the curve**, and §8 is where the returns arrive, on the same assumptions.

The conclusion is narrow and it matters: **the facility funds the open-market position, and the open-market position services the facility. Own capital carries the concession, because nothing else can.** No warehouse lender will advance against negative carry, nor should they, and a partner who assumes otherwise discovers it in the first covenant test rather than in the model.

This resolves into a rule about sequencing rather than a fixed ratio:

Equity leads, leverage follows the book. In the years when the venue is mostly cornerstone and very little open market, the partner is carrying a concession and should be carrying it with equity. As the float accumulates and the secondary book deepens, the open-market leg, the spread on resale, and the loan book against other holders all arrive together, and each of them is an income stream a facility can legitimately be lent against.

Two practical consequences the model makes visible:

Nothing is idle that has somewhere to go. In each of the first three years the binding constraint is capital, not supply: there is more property arriving than the partner can absorb. That is the correct state, and it is the argument for a larger commitment rather than a more leveraged one.

The loan book is a later business. Advances in §7 are made against the float the partner does *not* own. Early on the partner owns most of what exists, so the lendable base is near zero and capital allocated to lending sits still while paying facility cost. It becomes real, and becomes the annuity that outlives the dealer years, only once a substantial float is held by other people.

Credit: loans against holders, never against buildings

A venue that only permits buying and selling has done half the job. The owner in section 3 often does not want to sell at all; they want access to equity while keeping the asset. That requires borrowing.

Lending against the property would be the conventional approach and it is wrong here. If a property takes on debt, every partition of it changes character the day the lien records: a holder who bought an unlevered claim now holds a levered one, with first loss in front of them, having sold nothing. **That breaks fungibility across time**, which is the property the entire order book depends on. It also imposes leverage on dissenting holders by majority vote, for which there is no clean remedy.

So loans are made against **holders**, not properties.

A borrower pledges partitions (any partitions, across any number of buildings) into a collateral contract and receives a single blanket loan. No property is encumbered, no vote is taken, no other holder of those buildings is affected. **Every property on the platform remains free and clear, permanently.**

The terms are deliberately plain. Advances are **interest-only**, with principal due at a **36-month balloon**. Nothing amortises; the borrower services interest out of a distribution they were receiving anyway, and the principal is repaid, refinanced, or satisfied from the collateral at maturity. A position **90 days delinquent is callable**, after a defined sequence of notice, by selling the pledged partitions into the book.

Two consequences follow, and they run in opposite directions. The 36-month term is what makes the origination fee economically meaningful: a one-time fee earned across three years rather than ten is a materially different instrument, and the model treats the expected life as an input for exactly that reason. **The 90-day call is what makes the loss assumption defensible**, and it is the substantive basis for P4: a defaulted position here is liquidated in days at a printed price, not foreclosed over eighteen months at an appraised one.

Repayment occurs by interception. Because the venue computes and pays every distribution, the loan payment is taken before the distribution reaches the borrower; the remainder is theirs. This is a hard lockbox, familiar from CMBS, but stronger: a lockbox is an instruction to a bank, whereas this is the order of operations in the contract that pays them. There is no window in which the borrower holds the money and elects whether to forward it.

Stated precisely: **first claim on the distribution, behind nothing but the building's own operating costs.** There is no mortgage and therefore no lien priority in the real property sense; what exists is a security interest in the partitions perfected by control, plus a standing payment direction. Against every other creditor of that holder, it is first.

Capacity is derived rather than set. At interest-only:

$$\text{DSCR} = \text{cap rate} \div (\text{LTV} \times \text{rate})$$

Risk pricing raises the rate with leverage; coverage lowers the maximum rate that still pays itself. The curves cross, and the crossing is the maximum advance, determined entirely by the market yield of what was pledged:

COLLATERAL PLEDGED	MAX LTV	RATE THERE	COVERAGE
4.50% yield	58.0%	6.20%	1.25x
9.38% yield	79.5%	9.43%	1.25x
12.00% yield	88.8%	10.81%	1.25x

No one writes this rule. Pledge higher-yielding partitions and you may borrow more, because the cash flow covers more interest.

Enforcement is mechanical and provably self-curing. On shortfall, the contract takes what is available and the gap becomes arrears; uncured, it liquidates partitions pro rata and returns any surplus.

Pro-rata liquidation always restores coverage, and the proof is short. Coverage below 1.00x means $V \cdot c < L \cdot r$. Since the loan never exceeds the collateral, this forces $c < r$: **whenever a borrower is short, their portfolio yield is necessarily below their loan rate.** Selling any slice therefore removes distributions at c and interest at r , and r is always larger. Coverage improves with certainty, requiring no ranking of assets and no discretion.

The cure should restore coverage to the rate card minimum rather than merely clearing arrears; a borrower cured to break-even is short again the following month, and the alternative is a grinding sequence of monthly forced sales.

Disposition into an observable order book at a printed price, with surplus returned, is also a clean **commercially reasonable disposition** under Article 9. This is the substantive basis for a lower loss assumption: a defaulted position is sold in days at a verifiable price rather than foreclosed over eighteen months.

Two triggers are required. The structure above is cash-flow based, and rents are sticky while cap rates are not. A repricing in which every tenant pays in full moves the mark without touching coverage:

MARKET CAP RATE	VALUE CHANGE	COVERAGE	LTV
9.38%	baseline	2.23x	60.0%
12.00%	-21.8%	2.23x	76.8%
15.00%	-37.5%	2.23x	95.9%

Every payment on time, coverage unchanged the whole way down, and the loan at 96% LTV. The venue therefore runs a **coverage test** monthly from the intercept and an **LTV test** continuously from the book. The second is possible only because partitions carry a live price. A bank holding a mortgage cannot mark its collateral between appraisals at all.

7.1 · The taper builds the loan book

There is an objection to any contractual buyer of first resort, and it is the strongest one in this paper: a liquidity provider profits from illiquidity, so why would it ever allow the market to mature past needing it? Earlier drafts listed this as unsolved and pointed at ownership of the venue as the only available answer. That answer was too weak, and it is not required.

The lendable base is the float the cornerstone does not own. Advances are made against other holders' partitions. A cornerstone that takes 90% of every listing has almost no one to lend to; one that takes 40% has a loan book six times the size, made of the same buildings. The two businesses are not sequential by accident and they do not merely coexist: **the second is manufactured by the retirement of the first.**

An earlier draft of this section claimed that lending simply outearns owning, so the cornerstone tapers out of self-interest. **That claim is false at the margin, and the published model says so.** A dollar of capital put into inventory is levered by the borrowing described in §6.1; a dollar lent is not. At a $1.92\times$ multiplier on a 9.43% blend against a 7% facility, a marginal dollar of inventory earns **11.68%** and a 10% loan earns **10.37%**; owning wins by 131 bps, and it would take a lending rate near **11.3%** to tie. While listings are scarce and the concession is wide, a rational cornerstone prefers to own.

The objection is answered in §6 rather than here, and it is answered by removing the choice. The commitment is a posted bid, so the taper is not the cornerstone's decision: it happens when other buyers step inside the quote. What §7.1 has to establish is narrower and sufficient: not that the cornerstone *wants* to taper, but that **it is not destroyed by tapering**, because a second business is waiting at exactly the moment the first one goes.

It is waiting because the same maturity that retires the bid also moves the crossover. Two things happen together, and neither requires anyone's good faith:

Listings stop being the constraint. Once buying power exceeds the supply arriving, a marginal dollar of inventory earns *nothing*; it sits idle and still carries facility cost. The comparison does not merely tighten, it collapses, and lending wins at any rate clearing the cost of funds.

The concession compresses. As it does, the levered inventory return falls toward the lending rate and the crossover descends to meet the rate already being charged. §8's table dates this; the model prints the crossing.

So the alignment is structural rather than contractual, which is what matters, but the mechanism is **scarcity and compression**, not a standing rate advantage. And the lendable base is manufactured by the retirement itself: **every point of ownership handed back is a point of collateral to lend against.** The cornerstone does not have to prefer the second business today. It has to find it there when the first one ends, and the same arithmetic that ends the first one builds the second.

The handover is not smooth, and the roughness is where the real risk sits. Demand for advances is bounded by take-up and advance rate: with 30% of holders borrowing at a 50% advance, a loan book can absorb only about 15% of the float held by others. Inverting that gives a condition the partner should size against directly:

Outside float must reach roughly 6.7× the cornerstone's capital before lending alone can absorb its balance sheet.

Below that threshold, tapering releases capital faster than the loan book can take it up, and the released capital sits idle carrying facility cost. The model shows this as a genuine trough: on a small platform, a cornerstone that gives back share too early loses more carry than it gains in interest, and the year turns negative. On a platform several times its own size, the same cornerstone earns most of its money lending, holds very little, and the share it takes of new listings stops mattering to its return at all.

The implication is a sizing rule rather than a schedule. A cornerstone sized against the platform tapers profitably from the beginning. A cornerstone sized against its own appetite arrives at the trough and has an incentive to stall there, which is the original objection, reappearing not as a flaw in the mechanism but as a consequence of writing the commitment too large. The concession table in §6 bounds the cornerstone from above on price. **This bounds it from above on size, and for a different reason.**

8

Predictions

If H1–H3 hold, the following should be observable. Each is stated so that it can fail.

P1 • CLEARING

Standard-denomination partitions of ordinary income property will clear at a new-issue concession of roughly 150–250 bps wide of the seasoned secondary, materially tighter than the discount the same property would suffer as a bespoke fractional interest.

Fails if the market demands materially more; the cornerstone cannot break even at any useful share and the venue does not start.

P2 • SEASONING

The concession will compress measurably as verified payment history accrues, on a half-life in the range of two years, and this will show up first as a **falling fill rate on the cornerstone's posted bid** rather than as a change in the bid itself.

Fails if partitions of ordinary property trade permanently wide, in which case the cornerstone's bid keeps getting hit, the role never retires and the commitment is open-ended.

P3 • SUBSTITUTION

On properties whose cap rate sits below prevailing second-lien pricing, owners offered both instruments will choose partial sale at a materially higher rate than chance.

Fails if owners systematically prefer debt at a worse price, which would indicate the constraint is preference or control, not cost, and would falsify H1 directly.

P4 • CREDIT PERFORMANCE

Cross-collateralised, distribution-intercepted loans against partitions will realise losses below comparable conventional lending, on the strength of liquid collateral and mechanical disposition. **The claim rests on the 90-day call in §7, not on borrower quality:** the same borrower, the same collateral and a twelve-month workout produce a different number.

Fails on the first real credit cycle if they do not, and fails specifically if the call proves unenforceable in practice or the book is too thin to absorb a liquidation at the moment one is needed, which is the same depth assumption P5 carries, arriving as a credit risk.

P5 • DEPTH

Book depth will grow faster than the count of listed properties, through a specific mechanism: each owner who monetises a position becomes a candidate buyer of other positions, so every listing adds a participant to the buy side as well as an instrument to the sell side.

Fails if sellers exit with their proceeds rather than redeploying, in which case the book fragments into thin single-name markets, which is how prior venues failed.

P6 • CAPACITY

Time to liquidate a position will fall materially as depth accrues, and advance rates will rise with it, without any change to the rules.

Fails if depth does not translate into borrowing capacity, in which case the network effect is rhetorical.

P7 • RESERVATION YIELD AND THE REPEAT SELLER

Owners who decline a partial sale priced at open-market yields will transact at cornerstone yields, and a measurable share of those who complete one sale will return for a second at wider pricing than they first refused.

Fails if repeat sellers demand the same yield as first-time sellers, in which case the seller base never seasons, the open-market leg is permanently dependent on new entrants, and the cornerstone's retirement rests on P2 alone.

P8 · ALIGNMENT

Buildings in which a material share of partitions is held by their own occupants will show better collections, lower turnover and lower maintenance cost than matched buildings in which none is, and the venue's aggregate book depth will rise faster than its asset count, because participants hold more than one role.

Fails if occupant-owners behave no differently from occupant-tenants, in which case the third source of value in §3.4 is rhetorical, H2 reduces to the marketability discount alone, and every claim in this paper about the system being worth more than its parts should be struck.

P9 · CONVERSION

As the cornerstone's share of new listings falls, its interest income will rise with the float passing into other hands, and beyond a threshold near $6.7\times$ its capital in outside float, lending will exceed carry as its largest source of income. **This is a claim about the mix of income, not about marginal returns:** §7.1 is explicit that while listings are scarce, owning outearns lending per dollar of capital, and the conversion is driven by listings ceasing to be available and by the concession compressing, not by lending becoming intrinsically better.

Fails if advance take-up is low enough that the loan book never scales with the float, in which case tapering is a pure loss of income, the incentive objection in §10 returns in full, and the commitment needs a contractual taper the mechanism cannot enforce.

P11 · SOLVENCY

The mechanism's survival is governed by the cornerstone's cost of funds rather than by any parameter of the venue. Holding every other assumption fixed, a platform whose partner funds at 7% will still be earning positive carry in year seven, and one funding at 9% will be paying to own property by year three.

Fails if the blend proves less sensitive to the funding rate than modelled, which would mean the concession compresses more slowly than §8 assumes, and would be good news. It is stated because it is the assumption most likely to be waved past in a term-sheet conversation, and the one that decides whether there is a business.

P10 · PERMANENCE

Partitions of a property will continue to trade in later cohorts without a further concession, and a second owner of the same building will list subsequent tranches at a materially tighter concession than the first, because the divisibility, the payment record and the price history already exist.

Fails if each new tranche requires the full initial concession again, in which case the conversion is not permanent, the stock argument in §3.5 collapses to a flow argument, and the cornerstone's commitment has no end.

Method: the minimum test

None of the above is resolvable from a model. The smallest experiment that discriminates between the hypothesis and its rejection is:

A small portfolio of ordinary income properties, brought on free and clear, from a single owner. One cornerstone. Real capital. The properties mint, the book opens, and the following are recorded without adjustment: **the concession at which each listing clears; the concession on the second and third cohorts against the first; daily book depth; the take-up of partial sale against a priced second-lien alternative offered to the same owners; the performance of the first loans written; for P7, the yield at which each owner declines and the yield at which they accept, recorded per owner, together with whether and at what price they return for a second sale; and for P10, the concession on a second tranche of a property already listed, against the concession on its first.**

That last item costs nothing beyond keeping the record, and it is the only way to observe the behavioural parameter in §3.3. **Every declined offer is data.** A pilot that logs only its closings discards the half of the sample that determines how long the cornerstone must stand.

P1 and P3 are answerable within one cohort. P2 and P5 require roughly two years. P4 requires a downturn and cannot be scheduled.

A pilot that produces a wide, non-compressing concession and no depth has falsified the hypothesis at a cost small enough to be worth paying.

Limitations and open problems

The demand assumption is the weakest point. P1 carries the entire structure and I cannot resolve it analytically. Everything downstream (the cornerstone's viability, the taper, the arc) is conditional on a number nobody has measured because the market does not exist.

The alignment claim is the least evidenced thing in this paper. §3.4 argues that overlapping roles internalize costs conventional ownership leaves external, and that this source of value does not exhaust. The direction is defensible from first principles: occupant-owners and pure tenants face different incentives, and that is not controversial, but **the magnitude is asserted and nothing here measures it.** It is possible that the effect is real and small enough to be irrelevant beside the marketability discount, in which case H2 should be read as the first two sources only. I have stated it at full strength because an effect stated weakly cannot be tested, not because I can demonstrate it.

The seasoning rate of the seller base is unmeasured, and the commitment is priced off it. §3.3 asserts that an owner's reservation yield widens after one completed cycle. The direction of that claim rests on daily practice in second-lien origination; **the speed of it rests on nothing at all.** If the turn takes two quarters, the cornerstone's

obligation is modest and self-limiting. If it takes four years, the partner funds the concession across a far longer interval than any of the figures in §6.1 contemplate, and the commitment may be untenable at any share. This is the parameter I would most want a reader to challenge, and it is the cheapest one in the paper to measure.

The two curves must cross in the right order. The design assumes depth arrives faster than the concession compresses. If it does not, there is an interval in which the cornerstone holds inventory it can neither profit from nor exit. This is a timing risk with no mitigation in the mechanism itself.

The cost of funds decides this, and nothing in the venue does. Every mechanism in this paper is a claim about market structure, but the structure's survival turns on a number that belongs to the partner's treasury and is invisible from inside the venue. Run the model forward with the concession compressing at 60 bps a year and the cornerstone never raised: at a **7%** facility the blend still clears by 53 bps in year seven, thin, but alive the whole way. Change one input to a **9%** facility, with identical listings, identical compression and identical everything else, and the blend goes under water in **year three**. The venue is the same venue. **That is the sensitivity the mechanism is most exposed to and least able to influence**, and it is stated as P11 so that it can be argued with.

There are two distinct failures and they are usually conflated. The first is losing the dealer spread: the concession closes, the gain per turn goes negative, and selling stops making money. This is survivable and largely the plan: a negative gain per turn means one should stop selling, not stop owning, and the position continues to throw off carry. **The second is the blend ceasing to clear the cost of funds**, at which point the holder is paying to own property. That is not a change of business but the end of one, and no adjustment to the cornerstone reaches it: the concession has already gone, and the cornerstone slice is a drag on the blend rather than a source of it. A reader evaluating this paper should be clear which of the two any given objection is about, because they have different remedies and only one of them has any.

Fungibility across buildings is asserted, not demonstrated. Every property is different. The claim is that uniform denominations quoted in yield make them comparable even where they are not interchangeable, and that cross-collateralised lending diversifies across them. If buyers decline to treat them as one asset class, P5 fails and the book fragments.

The intercept must hold at scale. The credit structure rests entirely on the venue controlling the payment rail. Any operational failure, or any jurisdiction that declines to recognise the payment direction, degrades the position from first to unsecured.

Regulatory treatment is unsettled and is a cost rather than a barrier; 58% of asset owners cite regulatory constraints as a hurdle to tokenized instruments generally. Nothing here depends on favourable novel treatment, but nothing here is free of it either.

The issuance boundary has to hold operationally, not just contractually. The cornerstone's subsidised bid is available to an issuer and to nobody else, which means the venue must be able to tell the two apart at the moment of execution, and any leak in that boundary is not a small cost but an arbitrage that scales until the cornerstone's capital is gone. A venue that allows a mint allocation to be resold into the same cornerstone bid within the same window has reproduced the problem under a different name. **This is a systems requirement with a balance-sheet consequence**, and it belongs in the pilot's test plan rather than its assumptions.

What the cornerstone is left holding is genuine rate risk on a bounded book. It cannot stall its own taper: the commitment is a posted bid, so the taper happens when other buyers step inside the quote, which is not its decision (§6), and it cannot widen the bid, because the yield is fixed for the term and the commitment is bounded by quantity instead. What remains is a fixed bid against a floating cost of funds, mitigated by the annual cap, the defined term and the dislocation clause, and hedgeable in the ordinary way. That is a priced risk rather than a flaw, but it is the cornerstone's risk and should not be described as anything else.

The incentive objection is answered in §7.1 and the answer is narrower than earlier drafts claimed. Lending does not outearn owning while listings are scarce; what is true is that the cornerstone is not destroyed by tapering, because the lendable base is built out of exactly the partitions it does not own. What remains open is quantified there: the two businesses do not hand over smoothly, and there is an interval in which the carry given up exceeds the lending picked up. **That is a sizing problem, not an incentive problem,** and it is the reason the commitment should be sized against the platform rather than against the partner's balance sheet.

11

Invitation

I am not asking for capital at this stage. I am asking to be argued with.

If you work in real estate credit, in market structure, or you allocate to private real property, the places I would attack first are section 3's substitution claim, the reservation-yield theory in section 3.3, the third source of value in section 3.4, the conversion threshold in section 7.1, the permanence claim in section 3.5, section 6's concession arithmetic, and the timing assumption in section 10. If the proposition in section 3 is wrong, nothing after it matters. If owners will not transact at the cornerstone bid, or having transacted will not come back at a wider one, the venue has a first cohort and no second. If the concession table is wrong, the cornerstone cannot be sized. If the curves cross in the wrong order, the commitment has no exit.

If you sponsor syndications or DSTs, section 2.3 is yours to falsify. You have divided real property for a living and watched what happens next. Tell me whether a standard denomination is genuinely the missing variable, or whether I am describing something you have already seen fail for reasons I have not accounted for.

If you originate second liens, section 3.3 is yours to falsify. You see the same owners I do. Tell me whether the refusal at open-market pricing matches what you observe, and tell me what you think happens to a borrower's appetite after a first draw that bought them an income stream rather than a payment.

The model is published with this paper and it is operable, and there is a manual for driving it. Every figure quoted here comes out of it, every assumption in it is an input you can move, and both links are in the sources note below. If you think the arithmetic is wrong, you do not have to take my word for the inputs: change them. I would rather find out from a reader than from a balance sheet.

The platform is linked there too, for anyone who wants to see the mechanism implemented rather than described. **It is not the argument.** If the proposition in section 3 is wrong, a working platform does not make it right, and I would rather hear that the proposition is wrong.

If it survives, the pilot in section 9 is the next step, and it is small.

Sources

Sources and verification status

Verified, September 2026: total and tappable home equity, second-lien share and volume (ICE, via Q2 2026 reporting); existing home sales, lock-in estimate, industry contraction (HousingWire, June 2026); commercial transaction volume and concentration (SignatureFD, 2026); maturity schedule and refinancing conditions (Matthews, 2026); tokenized RWA totals, liquidity commentary, and adoption obstacles (InvestaX, 2026).

Verified, September 2026 (marketability): restricted-stock study discounts: SEC Institutional Investor Study (1966–69) 25.8% mean, Gelman (1968–70) 33%, Moroney (1968–72) 35.6%, Maher (1969–73) 35.4%, Silber (1981–88) 33.8%, aggregating near 35%; pre-IPO studies: Emory (1980–2000) 46% mean, Willamette (1975–97) long-term average near 50%. **These are private-company equity studies, not real property.** They establish that markets price marketability explicitly and materially; they do not establish the magnitude for real estate, where the illiquidity-premium literature is actively contested. §3.4 says so, and a reader should treat the transfer of these figures to property as an analogy awaiting measurement.

Verified, September 2026 (rates): 10-year Treasury constant maturity at **5.00%** on 15 September 2026 (FRED, series DGS10, retrieved 18 September 2026). The bid in §6 is *not* indexed to this series; the figure is cited to show what an indexed bid would have posted, and as the reference against which a dislocation clause would be measured.

Requires citation before publication: de Soto’s dead capital estimate: confirm figure and edition. Second-lien pricing used in section 3 is illustrative and should be replaced with a sourced current average.

The three-year figures in §6.1, in full. Every figure in that section comes from the published model at the settings below. They are recorded completely so a reader can reproduce them rather than take them on trust; an earlier draft quoted figures that could not be reproduced from what it recorded, and those have been replaced.

Held constant across all three years: cornerstone share 35% at 4.50%; open-market leg 40% of each listing, leaving 25% to other holders; facility rate 7.00% with a 37.5 bps commitment fee; 60% of inventory pledged at a 50% advance rate; 15% of the accumulated float offered for sale each year; 15% of the secondary book; a twelve-month hold; 50 bps cost per sale; lending at 10.00% with a 200 bps fee, 30 bps expected loss, 30% take-up, a 50% advance and a three-year expected life.

	YEAR 1	YEAR 2	YEAR 3
Minted that year	\$200M	\$1.0B	\$2.0B
Accumulated float	\$0	\$200M	\$1.2B
Own capital	\$50M	\$150M	\$300M
Facility drawn / line	\$100M / \$200M	\$300M / \$600M	\$600M / \$1.2B
Secondary book volume	\$50M	\$150M	\$600M
Pool 2 mints at	12.00%	11.50%	11.00%
Seasoned float at	11.00%	10.50%	10.00%
Book trades at	10.00%	9.75%	9.50%
Split to inventory	100%	100%	85%

The concession implied by those yields is 200, 175 and 150 basis points, inside the range P1 predicts, and compressing as P2 predicts. The cornerstone-only cases quoted beside them are the same settings with the open-market leg set to zero.

Model

The model, the manual, and the platform

The figures in sections 6, 6.1, 7.1, 8 and 10 come from the BTCglobal equity partner model, which is published at the address below and is operable. It is not an illustration. Every assumption in it is a slider or a drop-down, the arithmetic is visible in the page source, and it carries a test suite of roughly two thousand assertions covering the identities, the direction of every lever, and the reconciliation between sections.

The model: every figure in this paper, with the inputs exposed: btcglobal.com/financial-modeling

Driving the model: a manual: what each control does, what it means for the partnership, and a working set of inputs for the first three years: btcglobal.com/financial-modeling-manual

BTCglobal: the platform itself, for readers who want to see how the mechanism described here is actually implemented: btcglobal.com

The first two are the evidence for this paper and the reader is invited to attack them. **The third is a different kind of link:** the paper's argument does not depend on any particular implementation, and a reader who finds the mechanism wrong should say so whether or not the platform exists.

Start with the manual if you intend to argue with the numbers. The model has eight sections and roughly thirty controls, and the order they are set in matters: supply first, then the exit, then price, then the balance sheet. The manual sets out that order and, more usefully, says what each readout means and where the model is knowingly incomplete.

Three places in the model are worth attacking first, because they are where it has already been wrong at least once:

- **The crossover in §7.1.** An earlier version compared an unlevered inventory yield against a lending rate and concluded that lending outearns owning. It does not, while listings are scarce. The correction is in the current build and in the text above; the general form of that error, comparing a levered return to an unlevered one, is worth checking for elsewhere.
- **The marginal spread.** A dollar of inventory earns the sale spread only while the secondary book still has room to absorb it. Once the book is saturated, additional inventory is carry-only, and the crossover falls sharply. Whether a real book saturates the way this one does is an empirical question the model cannot settle.
- **The absence of price impact.** The model caps what the cornerstone can sell but never charges it for moving the price against itself. Raising the book-share input therefore always improves the return, which is not how a real book behaves. A high share should be read as an assumption about market depth, not as a strategy.

Practitioner evidence in §3.3, the clearing range on second liens and the observed refusal at open-market equity pricing, is the author's own origination experience, stated as such. It is offered as the reason to run the test in §9, not as a substitute for having run it.

NOTICE

This document is provided for informational and technical discussion purposes only. It is not an offer to sell or a solicitation of an offer to buy any security, token, or other instrument, and it is not a recommendation with respect to any transaction. No offering of any security will be made except by means of documentation qualified with the Securities and Exchange Commission and delivered in accordance with applicable law.

Statements regarding regulatory treatment reflect the company's present analysis and are subject to written confirmation by qualified securities counsel. Nothing herein constitutes legal, tax, accounting, or investment advice. Return figures are outputs of a financial model based on stated assumptions and are illustrative rather than projections of actual results; the model is published at btcglob.com/financial-modeling and every assumption in it is an input the reader can change.

Forward-looking statements, including all predictions in section 8, describe expectations that may not be realized. Historical figures are drawn from the sources listed above and are current as of the dates indicated in those sources.

BTCglobal LLC, September 2026.