BANKING INFRASTRUCTURE · BRIEFING

Block Margin

On-chain settlement and margining for *interest rate derivatives*.

A briefing for banking partners evaluating infrastructure to modernise bilateral rate-hedging with their corporate clients.

PREPARED BY DYNAMIC STRATEGIES, GIBRALTAR

DOCUMENT BRIEFING V1.0

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SECTION 01

01

The infrastructure that sits between a bank's rate desk and its corporate clients has not materially changed since the ISDA Master Agreement was written. Block Margin replaces that plumbing with a single on-chain protocol.

EXECUTIVE SUMMARY

A single on-chain protocol for bilateral rate hedging, *built by rates practitioners.*

Block Margin is a protocol for settling and margining bilateral interest rate derivatives on a public blockchain. It is built for the segment of the market that traditional infrastructure underserves: mid-sized corporates hedging floating-rate debt with their relationship bank.

$500T+	$250B+	~1.0%	<1 min
GLOBAL IRD NOTIONAL OUTSTANDING[1]	DAILY VOLUME WITH SMALL CORPORATES & RETAIL	AVERAGE MARKUP CHARGED TO SMALL CORPORATES	SETTLEMENT CYCLE ON TESTNET (VS. T+2)

The structural problem

Bilateral rate swaps between a bank and a corporate still require months of documentation (ISDA Master, CSA, credit lines), variation margin that moves once a day by email, and month-end mark-to-market statements that must be reconciled from scratch on both sides. The economics of servicing a 500k or 2m trade are uneconomic for a dealer; the capital charge under Basel III and the operational load of bilateral margining force banks to charge unmargined markups of 50 to 150 basis points on top of the interbank rate. The corporate, in turn, is priced out of the hedge.

What Block Margin does

Block Margin replaces that bilateral plumbing with a single, shared on-chain protocol. The trade, the CSA parameters, the valuation curve, the margin balances, and the lifecycle events all live as deterministic state on the blockchain. The same numbers are visible to the bank, the corporate, and, where required, the regulator, because there is only one record.

- **Shared ledger of obligations.** The trade terms, margin balances, and cashflow calendar are one record, not two. Reconciliation is a query, not a process.
- **Continuous variation margin.** Oracle-fed curves revalue positions on every block. Margin calls compress from end-of-day email to sub-minute automated transfers.
- **Deterministic settlement.** Fixings, cashflows, and close-out are executed by the validator against the same datum the bank sees, not against a bilaterally reconciled spreadsheet.
- **Segregated collateral.** Collateral sits in a per-counterparty custody contract, not on the bank's balance sheet, addressing the wrong-way risk that drives counterparty credit capital.

Who this document is for

Written for Heads of Rates Sales, Heads of Corporate Banking, and Treasury Innovation teams at commercial and investment banks. Intended to be shareable internally with credit, operations, risk, and technology stakeholders, and to support a board-level discussion of a pilot engagement.

Status

01 · Built

Live testnet

A working prototype is deployed at **blockmargin.app/trade** on the Cardano Preview testnet. Paper trading of 3-month SOFR FRAs is open. Order book, pricer, risk engine, market data, portfolio, liquidation, and settlement are all implemented end-to-end.

02 · Next

Bank pilot phase

Shortlisting one / two partner banks for a controlled bilateral pilot with real corporate counterparties on the testnet,and after a legal / reg review, on the main net

Why Dynamic Strategies

Block Margin is built by Dynamic Strategies, a Gibraltar-based firm led by a former NatWest Markets rates trader and stress-testing lead, supported by a team of blockchain engineers who have operated in production on Cardano since 2020.

Rates-desk origin

11 years at NatWest Markets in front-office rates trading, risk, capital management, and regulatory stress testing. Models worked: VaR, SVaR, IRC, DRC, CVA, SABR, inflation-linked. Stress programs delivered: ICAAP, ILAAP, Bank of England, EBA.

On-chain delivery record

Building on Cardano since 2020. Live products include the Cardano Wallet Connector library, a staking reward calculator, and a public GraphQL API for Cardano blockchain data. Validator-node operators on multiple Layer 1 and Layer 2 chains.

> *Block Margin is not "crypto for derivatives". It takes the parts of the bilateral workflow that practitioners already know don't work, and replaces them with a deterministic shared record.*
>
> DMITRY SHIBAEV, DIRECTOR, DYNAMIC STRATEGIES

SECTION 02

02

Bilateral rate swaps between banks and corporates still run on 1995-era workflows. The documentation, the margining, and the reconciliation cycle all carry costs that get priced back into the corporate quote.

THE PROBLEM

Bilateral rate hedging still runs on *1995-era* workflows.

Every bilateral swap between a bank and a corporate still requires months of ISDA negotiation, margin calls that move once a day by email, and month-end reconciliations done from scratch. Three structural frictions sit at the core of the problem, and each is priced back into the corporate quote.

Friction 01

Documentation drag

Every new corporate hedging relationship requires an ISDA Master Agreement, a Credit Support Annex, and bilateral credit lines to be negotiated before the first trade. Months, not days. For a corporate treasurer hedging a three-year loan, the paperwork lead time often exceeds the urgency of the hedge.

Friction 02

Margin friction

Variation margin moves once a day, computed off-chain by a valuation agent, and delivered by email or via a margin-call utilities. Disputes take two business days to resolve. Each side runs its own valuation, reconciled bilaterally. For portfolios of 50+ trades, disputes are a weekly occurrence.

Friction 03

Broken reconciliation

Bank and corporate each hold their own version of the book. Month-end mark-to-market statements arrive late and break against the corporate's internal accounting. Hedge-effectiveness testing under IFRS 9 becomes an audit exercise rather than a management tool.

The cumulative effect

Each friction alone is tolerable. Taken together they make bilateral rate hedging uneconomic for any trade under roughly five million notional, the exact segment where small and mid-sized corporates sit.

> THE STRUCTURAL POINT
>
> The unit economics of bilateral swap servicing collapse at small ticket size. The bank's real choice is not tight spread versus wide spread. It is wide spread versus not serving the client at all.

How the markup is built: unmargined versus margined pricing

A dealer quoting a rate to a corporate prices in every capital, liquidity, credit, and operational cost that sits behind the trade. The majority of those costs are a direct function of **whether the trade is margined or unmargined**. Removing the margining friction collapses most of the markup.

EXHIBIT 1

The markup on a 3-month SOFR FRA decomposes into risk and capital charges; margining collapses most of them

Component	Unmargined	Margined	Delta	Drives
Stress-test buffer	0.02%	0.00%	−2 bps	ICAAP / regulator stress
Risk-weighted assets (RWA)	0.08%	0.01%	−7 bps	Basel III CCR capital
Liquidity regulation cost	0.05%	0.01%	−4 bps	LCR / NSFR charge on exposure
Counterparty credit risk (CVA + FVA)	0.20%	0.01%	−19 bps	Expected loss & funding
Commercial spread	0.20%	0.05%	−15 bps	Sales & operational cost
Total markup over market rate	**0.55%**	**0.08%**	**−47 bps**	**Quoted spread to corporate**
Market forward rate	*4.00%*	*4.00%*	-	*OIS-discounted SOFR curve*
Quoted rate to corporate	**4.55%**	**4.08%**	−47 bps	

Source: illustrative decomposition based on dealer pricing practice at UK / EU investment banks, 2024. Figures are indicative; not bank-specific. Commercial spread is typically higher for sub-1m notional.

Why margining has not already solved this

Posting margin is operationally heavy for smaller corporates. It requires systems, staff, and treasury workflows to calculate exposures, reconcile with the bank, and wire collateral daily. Large banks and institutional investors have back-office teams for this. Small corporates do not, and the cost of building that capability exceeds the savings it would produce. Block Margin reverses that ratio.

> WHAT THIS MEANS FOR THE BANK
>
> The 47 bps saving is not a loss to the dealer. Under margined mechanics, the CVA reserve, the LCR charge, and the RWA capital all fall. Most of the saving comes from releasing regulatory capital, not from compressed dealer margin.

The effect on the corporate: priced out, or uncovered

A small corporate with a three-year floating-rate loan has the same economic need as a blue-chip issuer: lock in interest cost and protect forecasting. In practice they face three worse-than-market outcomes.

× CURRENT STATE

- Driven away by documentation lead time. The hedge is needed before the ISDA is signed.
- Quoted at 50 to 150 bps over the interbank rate, consuming the margin on the underlying loan.
- Paperwork-heavy: CSA parameters, credit lines, substitution rules all negotiated bilaterally.
- Termination charged as one-off commercial fees.
- Often given up on entirely. The corporate runs unhedged.

✓ TARGET STATE ON BLOCK MARGIN

- Hedge initiated in under ten minutes through the bank's web console against the on-chain protocol.
- Quoted at single-digit basis points over the curve, as capital and liquidity charges collapse.
- CSA parameters encoded once in the protocol. KYC handled by the onboarding bank.
- Treasurer sees the same on-chain record as the bank.
- Termination is an on-chain unwind priced against the shared mark-to-market.

Worked example: a 3-year, 500k hedge on a SOFR-linked loan

A small corporate fixes the rate on a 500,000 dollar revolver drawn against 3-month SOFR for three years, at a current forward rate of 3.00%.

Workflow element	Traditional bilateral	Block Margin
Lead time to first trade	2 to 4 months	Same day
Quoted spread over market	+80 to +120 bps	+8 to +12 bps
VM cycle	Daily, email-driven	Sub-minute, on-chain
Settlement cycle	T+2	< 1 minute on testnet
Reconciliation	Month-end, bilateral	Continuous, shared record
Three-year cost vs. market rate	**~15,000 USD**	**~150 USD**

Illustrative, derived from Exhibit 1 applied to a 500k notional three-year swap. Platform fee assumed at 0.01%.

SECTION 03

03

Interest rate derivatives are the largest derivatives market in the world. The underserved small-corporate and retail segment alone turns over more than $250 billion a day.

MARKET OPPORTUNITY

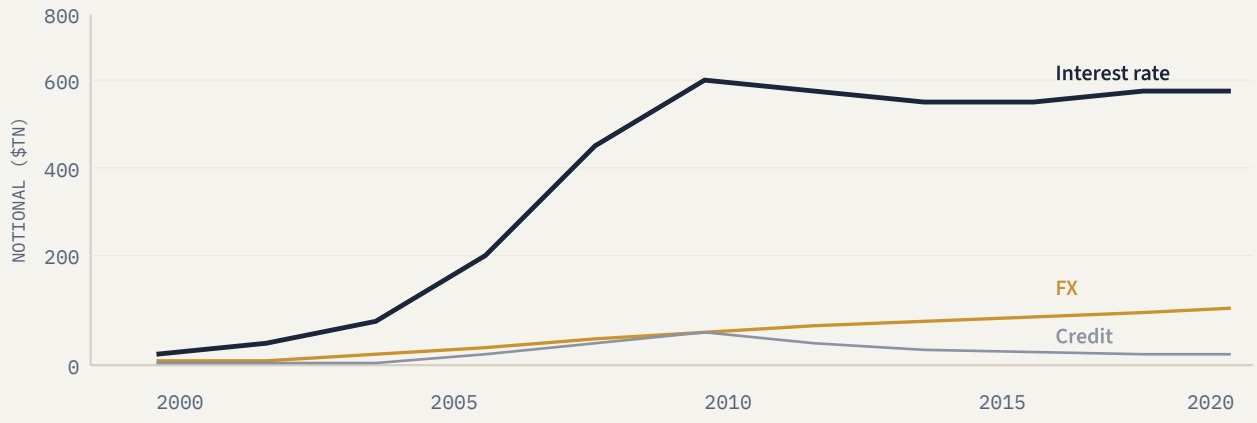
The largest derivatives market in the world, with a *structurally underserved* tail.

Interest rate derivatives dominate the global derivatives market, with more than 500 trillion dollars of notional outstanding. The top of the market (inter-dealer and institutional flow) is deep and tightly priced. The bottom of the market, where small corporates and retail hedgers sit, is not.

$500T+	$250B+	~5%	~1.0%
IRD NOTIONAL OUTSTANDING[1]	DAILY VOLUME: SMALL CORPORATES & RETAIL	SHARE OF DAILY VOLUME FROM THIS SEGMENT	AVERAGE MARKUP PAID BY THIS SEGMENT

EXHIBIT 2

Interest rate contracts dominate global OTC derivatives notional outstanding



Source: BIS OTC derivatives statistics, notional amounts outstanding, H2 each year. Data shown in trillions USD. Figures are directional.

Interest rate contracts outstripped FX and credit derivatives in the early 2000s and have held a roughly 10× lead since the Global Financial Crisis. Notional outstanding sits above 500 trillion dollars. Daily turnover in the rate-hedging market, across all segments, exceeds 5 trillion dollars.

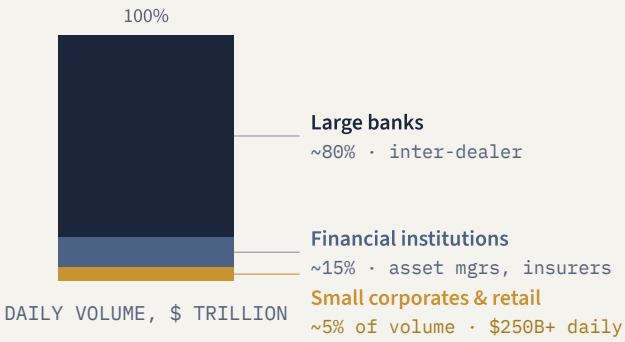
1. Bank for International Settlements, OTC derivatives statistics, semi-annual release.

The underserved tail is already $250 billion a day

Even at its current, suppressed size, the small-corporate and retail segment of the rate-hedging market turns over more than 250 billion dollars a day. At a one-percent average markup, the segment represents approximately 2.5 billion dollars of daily revenue captured by dealer spread, revenue that compresses sharply if the trade is properly margined.

EXHIBIT 3

Small corporates and retail are ~5% of daily volume today: the segment where unit economics are broken



Source: Dynamic Strategies analysis based on ISDA / BIS segment estimates. Share of daily volume; segment definitions approximate.

The growth opportunity lies in price and ticket size

Small corporates and retail hedgers today sit in the bottom-left of the market: small ticket sizes, poor price competitiveness relative to the inter-dealer market. Removing the operational cost of bilateral margining unlocks two degrees of freedom: it improves the quoted price, and it lowers the minimum economic ticket size at the bank. Both drive volume directly.

Bank upside

Lower capital, lower CVA, new volume

A margined exposure consumes materially less Basel III counterparty credit capital and attracts a lower CVA reserve. The same desk can service 10× more corporate names at the same or lower capital footprint, picking up platform-based revenue in addition to rate-desk spread.

Corporate upside

Affordable hedging for the SME tier

The hedge that was previously uneconomic becomes affordable. A 500k hedge at single-digit basis points over the curve is a viable treasury tool, not a budget line. Hedge penetration in the small-corporate segment moves from the tens of percent to the majority.

WHY A BANK PARTNERS RATHER THAN DISINTERMEDIATES

Block Margin does not replace the dealer. It replaces the bilateral plumbing between dealer and corporate. The bank keeps the relationship, the KYC, the credit line, and the revenue. The small-ticket segment becomes economically viable.

Why both sides win

The market opportunity is not a bank-versus-corporate redistribution. The majority of the value unlocked by continuous margining comes from *regulatory capital and reserve release* on the bank side. The bank and the corporate share a surplus that is being paid today to cover the capital and operational cost of an inefficient workflow.

⚒ FOR THE BANK

- **Lower CCR RWA.** Daily margined exposure attracts a small fraction of the capital of an equivalent unmargined exposure under Basel III counterparty credit risk rules.
- **Lower CVA reserve.** Expected loss from counterparty default falls with continuous margining; the CVA capital charge follows.
- **Lower liquidity charge.** LCR and NSFR contingent outflow calculations are lighter under a margined regime.
- **New addressable client base.** The sub-5m segment becomes serviceable.
- **Platform fee participation.** Banks can take a share of platform fees on trades flowing through their relationship.

⚒ FOR THE CORPORATE TREASURER

- **Hedge pricing close to market.** Quoted spread compresses from ~100 bps to single-digit basis points.
- **Faster onboarding.** No ISDA negotiation for each trade; KYC once with the relationship bank.
- **Continuous visibility.** The same MTM and margin record the bank sees is available in the treasurer's dashboard.
- **Cleaner hedge accounting.** Timestamped, immutable valuation trail supports IFRS 9 effectiveness testing.
- **Ability to unwind.** Early termination priced against the shared mark, not a one-off commercial fee.

Who is this document for inside a bank?

RATES SALES	A new channel to book flow with corporate clients whose ticket sizes today do not clear the desk minimum.
CORPORATE BANKING	A hedging product that can be offered alongside loans without months of ISDA documentation per counterparty.
TREASURY	Lower capital, lower CVA, lower LCR contingent outflow, applied to a growing client book.
CREDIT RISK	Continuously margined, segregated-collateral exposure with deterministic close-out; fits cleanly into existing CCR and CVA models.
OPERATIONS	Elimination of manual VM, margin dispute, and month-end MTM reconciliation workflows.
TECHNOLOGY	Adapts to wherever the bank sits on its blockchain journey. From a simple API into the existing treasury system, through wallet and custody integration, to running an oracle signer or validator node as the bank's on-chain capability matures.

SECTION 04

04

Three building blocks, one shared on-chain record: a common agreement, continuous margining, and deterministic settlement.

THE SOLUTION

One shared on-chain record, built from *three* institutional building blocks.

Block Margin is not a new asset class. It is the existing institutional workflow (ISDA, CSA, VM, settlement) rebuilt on a shared ledger. Every decision starts from: ***what would a dealer, treasurer, or ops team expect?***

01

Common agreement

An ISDA-style master agreement and CSA, encoded once at the protocol level rather than negotiated bilaterally. Eligible collateral, thresholds, MTAs, close-out and netting are codified in the validator.

02

Continuous margining

Variation margin recomputed on every oracle update and settled through a segregated custody contract. Initial margin sized from a documented risk-engine methodology, reviewable block-by-block.

03

Deterministic settlement

Fixings, interim payments, and final cashflows executed by the validator against the same datum both counterparties see. Cash leg in stablecoin or via a bank-rail bridge.

What this replaces in the existing workflow

TradFi concept	On-chain encoding in Block Margin
ISDA Master Agreement	Protocol-level smart contract (netting, default, termination)
Credit Support Annex	Per-counterparty parameters in the datum (thresholds, MTA, haircuts)
Trade confirmation	Minted token and datum, immutable and timestamped
Curve / fixing	Oracle datum, timestamped, signed by committee
Initial & variation margin	Locked collateral and continuous on-chain VM transfers
Settlement & close-out	Deterministic payment on fixing; liquidation on margin breach
Lifecycle events	Validator-enforced datum updates (reset, amend, terminate)
Regulatory report	Off-chain extract; UTI = tx hash + output index

The product surface

Block Margin starts with a primitive: the **Synthetic Future**, equivalent in behaviour to a 3-month SOFR CME futures contract. Its daily margining cycle is already understood, standardised, and price-referenced. From that primitive, the platform composes the instruments that practitioners actually use in bank-corporate hedging.

01 · Live

Synthetic Futures

3-month SOFR contracts with daily settlement against the oracle curve. Standardised maturities (Mar, Jun, Sep, Dec). The atomic unit.

02 · Live

FRAs

Forward Rate Agreements on 3-month SOFR with non-standardised maturities. Currently the flagship instrument on the testnet; the corporate-facing use case.

03 · Q3

FX Forwards

Multi-currency forward contracts. The second most requested product from corporates hedging cross-border balance-sheet exposure.

04 · Q4

Interest Rate Swaps

Compounded-SOFR swaps constructed as a series of FRAs. Settlement, margining and cashflow management compose from the FRA primitive.

Market conventions honoured end-to-end

Every trade on Block Margin honours the conventions a dealer would expect to see on a Bloomberg screen. The reference instrument on testnet, the 3-month SOFR FRA, is quoted and settled as follows:

REFERENCE RATE	SOFR, compounded in arrears over the FRA period; cashflow settled at period end
DAY-COUNT	ACT/360, modified following, USD business days
DISCOUNT CURVE	OIS-discounted, bootstrapped from oracle-fed SOFR tenor array
SETTLEMENT	USD stablecoin on testnet; bank-rail bridge on roadmap
MARK TIME	Continuous intraday; reference snapshot 17:00 UTC daily
INITIAL MARGIN	Risk-engine sized; methodology aligned with ISDA SIMM principles
VARIATION MARGIN	Continuous on every block, subject to MTA threshold

> WHY THIS MATTERS FOR BANK ADOPTION
>
> If the rate a dealer sees on Block Margin differs from the rate on their terminal by a few basis points because of a day-count or fixing mismatch, the product is broken. Conventions are the precondition for institutional use.

SECTION 05

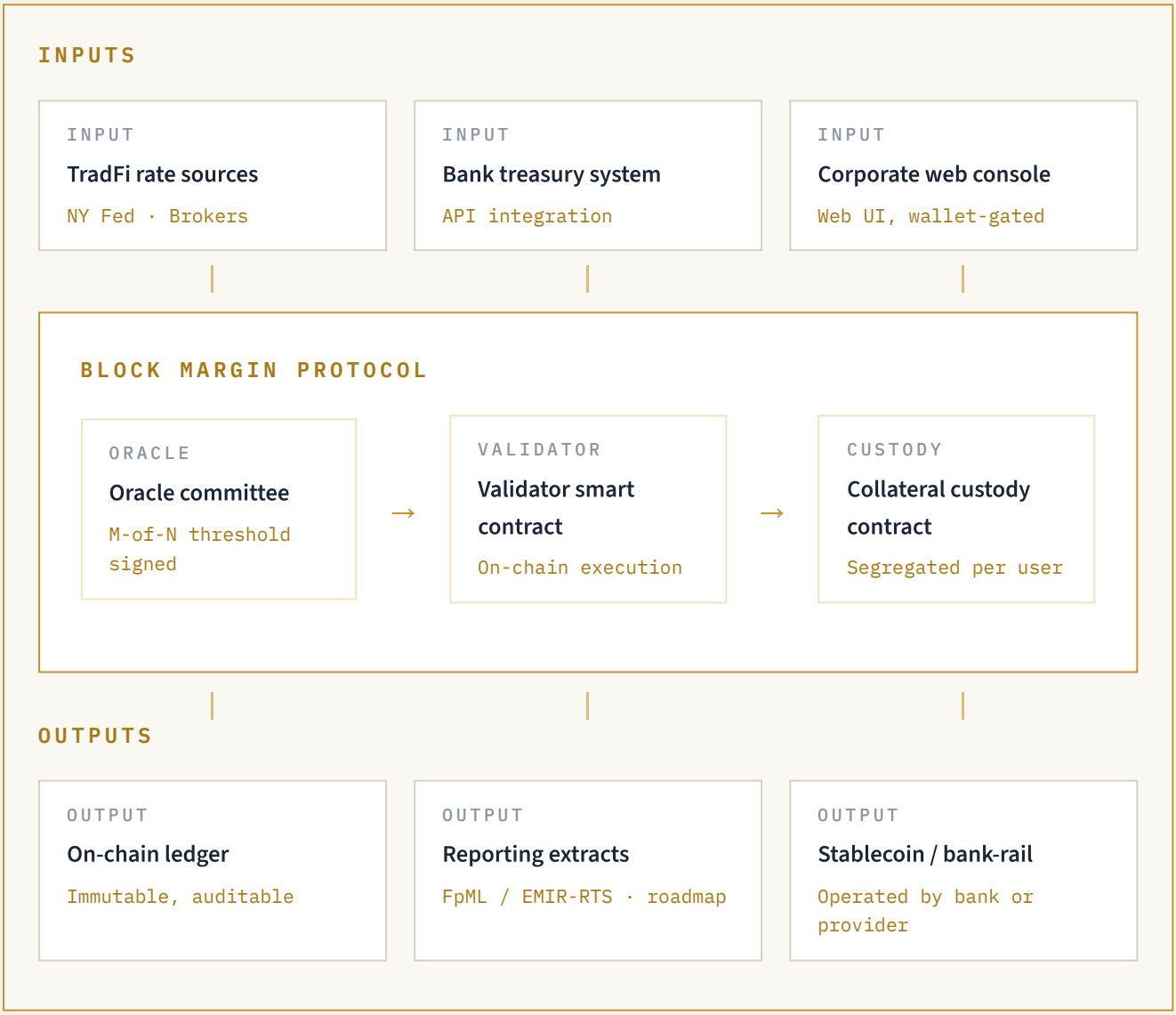
05

One smart contract, three trust boundaries. Rates from authoritative sources, executed by a validator, collateral in segregated custody.

ARCHITECTURE

One smart contract. *Three* trust boundaries.

Rates come from authoritative TradFi sources via a multi-signature oracle committee. The validator enforces margining and settlement. Collateral sits in segregated custody, auditable at any block.



Trust boundaries, explicitly

- **Oracle committee.** Threshold-signed by independent signers. No single signer can move the curve.
- **Validator contract.** Deterministic, parametrised, audited. Upgradability is explicit and governed.
- **Collateral custody.** Segregated per counterparty. Only the validator can move collateral, and only against a published oracle update.

Data flow and system components

The platform exposes six operational components to the bank and the corporate, each corresponding to a layer in the architecture. The bank consumes them through an API; the corporate, through a web console. Both see the same on-chain state.

Component 01

Front-end & back-end

The front-end abstracts blockchain primitives. The back-end is the layer between the front-end and the chain, handling data structure manipulation that blockchains are not optimised for.

Component 02

Pricer & risk engine

The pricer values every position against the oracle-fed SOFR curve. The risk engine sizes initial margin and revalues VM continuously. Both are documented, deterministic, and reproducible.

Component 03

Smart contracts

Codify FRAs, FX Forwards, Synthetic Futures, and IR Swaps. The datum carries tenor, term, notional, rate, and counterparty wallets. Validator enforces lifecycle rules.

Component 04

Blockchain & wallets

A public blockchain with privacy-enabled smart contracts. Trade terms visible only to parties; protocol state auditable at block level. Cardano Preview on testnet; production chain to be finalised with partner bank.

Where the bank plugs in

The integration surface for a partner bank is deliberately narrow. Three touchpoints:

TREASURY API	Bi-directional data flow between the bank's treasury/front-office system and the protocol. Trade capture, position view, margin movements, lifecycle events.
COLLATERAL BRIDGE	Bank-issued or bank-accepted collateral moves in and out of the custody contract. On testnet: stablecoin. In pilot: a controlled bank-rail bridge operated by the partner bank or a regulated third party.
KYC GATING	Corporate counterparties are KYC'd by the partner bank. Wallet-to-legal-entity addressability is the bank's responsibility, the same role it holds in the bilateral model.

> ASSURANCE AND AUDITABILITY
>
> Every valuation, margin call, and lifecycle event is anchored to a block height and oracle snapshot. An audit team can reconstruct the book at any historical point. Any disagreement is resolved by reading the chain.

SECTION 06

06

From draft to maturity, every event is a first-class primitive: inception, fixings, payment settlements, rate resets, amendments, partial terminations, final payment.

TRADE LIFECYCLE

Lifecycle events are *first-class* primitives, not after-thoughts.

An IRD is not a static row in a table. Over its life it passes through inception, fixings, settlements, resets, amendments, novations, partial terminations, and maturity. Each is an event the platform must record, display, and in most cases trigger.

The Synthetic Future workflow

The reference lifecycle on Block Margin, which FRAs, IRSs and FX Forwards inherit from. Four phases, each a deterministic state transition on chain.

T = 0 · DRAFT

Smart contract factory

- Contract minted; bank sets term, notional, rate.
- Corporate accepts terms.
- Pricer computes initial market value.

T = 0 · ACTIVE

Initial margin posted

- Risk engine sizes IM for both sides.
- Collateral locked in custody.
- Trade live in the datum, on shared ledger.

T = 1+ · IN FLIGHT

Continuous rebalance

- Oracle publishes new tenor array.
- Pricer revalues; IM and VM recomputed.
- Collateral delta settled on-chain.

T = MATURITY

Deterministic close

- Final oracle fixing at settlement.
- Margin settles against published rate.
- Cashflow released; trade archived on-chain.

Worked example

A 1-year SOFR hedge, 1,000,000 USD notional, contracted rate 3.00% (composed of four 3-month SOFR FRAs settled in arrears), bought by a corporate from a bank. Margin rebalances daily at 17:00 UTC.

Stage	Market rate	MTM (USD)	Buyer IM	Seller IM
Active (T=0)	**3.00%**	**0**	**12,500**	**12,500**
Day 1	3.20%	+2,000	12,500	12,500
Day 15	3.60%	+6,000	12,500	12,500
Maturity	**4.50%**	**+15,000**	**0**	**0**

Illustrative. MTM = N × tenor × ($R_{realized}$ - R_K). Final cashflow of ~15,000 USD accrues to the buyer at maturity. IM sized at ~1.25% of notional, consistent with a 3-sigma 2-day move on USD rates.

What happens when things go wrong

A protocol that cannot describe its failure modes is not credible. Block Margin addresses three risk events explicitly.

Risk 01

Oracle unavailable

If the oracle committee fails to publish a curve within the SLA, the validator falls back to a time-weighted average of prior snapshots. Beyond a second threshold, trading pauses. Settlement cannot execute against a stale oracle.

Risk 02

Margin breach

If a counterparty fails to meet a VM call within the cure window (testnet: 2 blocks), the validator enters close-out. The position is liquidated against the current oracle snapshot. No manual intervention.

Risk 03

Collateral price shock

Eligible collateral on testnet is regulated USD stablecoin. In pilot, a partner-bank bridge operates the collateral leg, removing stablecoin de-peg risk. Haircuts are CSA-encoded and enforced.

Three views of the same record

The same on-chain state is surfaced through three role-based views. A dealer does not want a treasurer's dashboard; a treasurer does not want a trader's blotter.

Dealer view

Trader's blotter

Live bid / offer, skew, DV01 by bucket. Fast ticket entry with pre-filled conventions. Risk in real time.

Treasurer view

Exposure dashboard

Portfolio MTM, hedge effectiveness, collateral posted, projected margin calls, next-cashflow calendar.

Ops view

Reconciliation console

Confirmation status, settlement status, lifecycle events, break report, audit trail, regulatory extract queue.

THE "WOULD THEY USE THIS" TEST

A corporate treasurer gets what they need for their board. A swaps trader can book a trade in seconds. A middle-office officer can reconcile today's book to yesterday's. All three see the same record.

SECTION 07

07

A working proof-of-concept is deployed and open for paper trading. Order book, pricer, risk engine, market data, and portfolio views are all live.

LIVE ON TESTNET

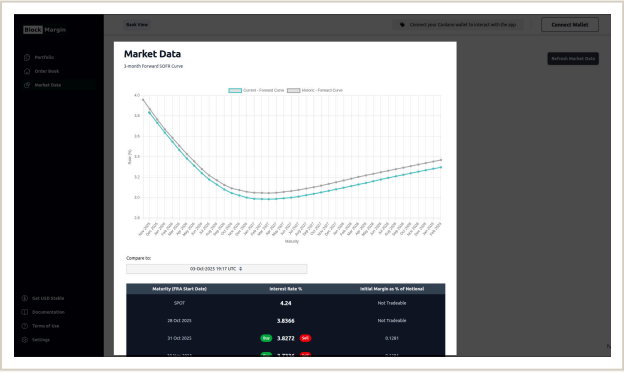
A working prototype is *open today* for evaluation.

The Block Margin testnet is deployed on Cardano Preview and open to paper trading of 3-month SOFR FRAs. KYC is not gated; test USD stablecoins are issued in-app. The full trade lifecycle (order book, execution, continuous margining, liquidation, maturity settlement) runs end-to-end.

URL	**blockmargin.app/trade**
NETWORK	Cardano Preview testnet
WALLETS SUPPORTED	Major Cardano Wallets
ACCESS	Open for paper trading; KYC not enabled on testnet
COLLATERAL	Test USD stablecoins, issued via the app
INSTRUMENTS	3-month SOFR FRAs (primary); Synthetic Futures on request
ORACLE CADENCE	Hourly updates from NY Fed SOFR data

EXHIBIT 4A

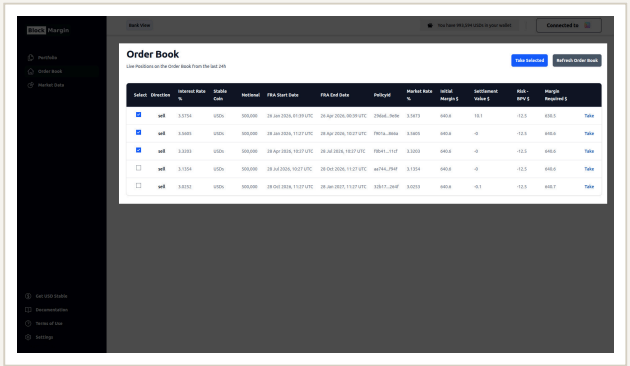
Live market data: SOFR curve and tradeable rates



Oracle-fed SOFR tenor array. Buy/sell rates shown per maturity; initial margin as % of notional.

EXHIBIT 4B

Order book: live FRA positions, last 24h



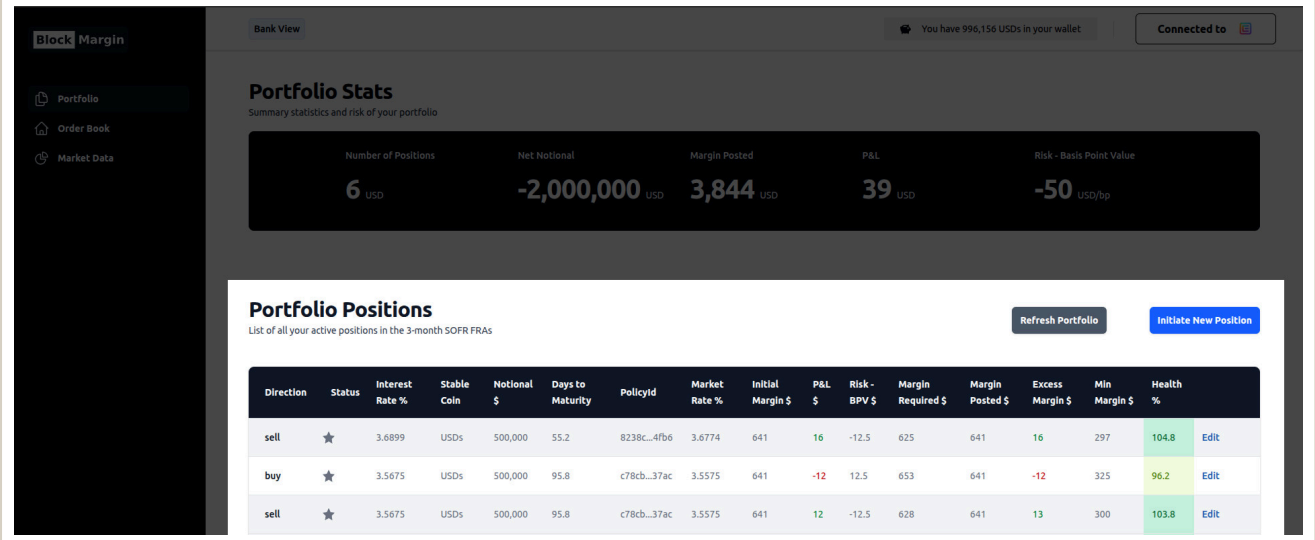
Each row is a live on-chain offer. A bank takes a position with a one-click flow that posts initial margin and transfers counterparty exposure on-chain.

Portfolio, risk and margin management

Every position carries live mark, initial margin, current margin posted, excess margin, risk basis-point value, and health percentage. Each is computed continuously against the oracle-fed curve. The same numbers are available to the counterparty.

EXHIBIT 5

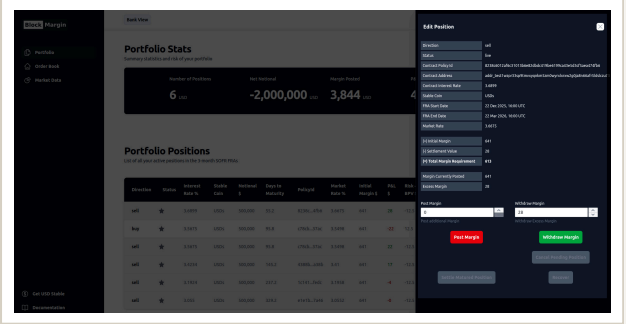
Portfolio view: stats, per-position health, and on-chain margin state



Every column derived deterministically from the on-chain datum and current oracle snapshot. Health < 100% triggers an automated margin call.

EXHIBIT 6A

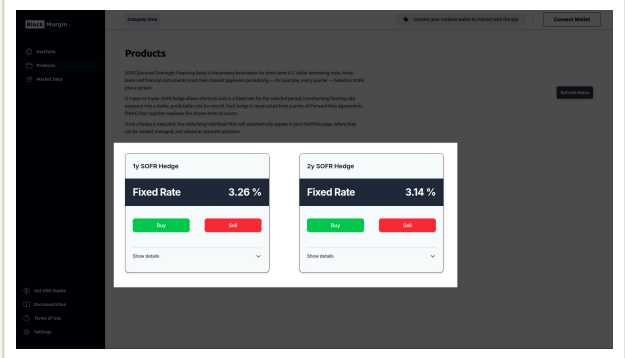
Edit a live position: post margin or withdraw excess



Margin currently posted, settlement value, total requirement, and excess are all shown side by side. Posting and withdrawal are on-chain transactions, not email instructions.

EXHIBIT 6B

Tenor bundles: 1y and 2y SOFR hedges from a single action



A 1y or 2y SOFR hedge is composed of four or eight 3-month FRAs and executed as a single workflow. The underlying series is visible to the user.

WHAT WE ARE PROVING ON TESTNET

The entire bilateral workflow runs deterministically against a shared record with sub-minute latency: execution, continuous margining, liquidation, settlement, reconciliation. Everything else follows from this point.

ECONOMICS & COMMERCIAL MODEL

A platform fee, shared with the partner bank.

A per-trade platform fee, paid at execution, with a revenue-share to the partner bank that brought the corporate counterparty. The fee is small enough to disappear inside the savings the bank already realises from continuous margining.

Indicative platform-fee economics

At 3 basis points on notional per trade, the platform fee is a small fraction of the ~50 bps markup reduction the corporate sees. Volume required to generate 1M USD of platform revenue at different trade sizes and fee levels, assuming 3-year average maturity:

EXHIBIT 7

Trades required to generate 1M USD platform revenue, by trade size and fee level

Average trade size	Fee 0.01%	Fee 0.03%	Fee 0.05%	Fee 0.10%
100,000	33,333	11,111	6,667	3,333
500,000	**6,667**	2,222	**1,333**	**667**
1,000,000	3,333	1,111	667	333
2,000,000	1,667	556	333	167
5,000,000	667	222	133	67

Assumes a 3-year average maturity and a linear fee of the stated basis points on notional. Highlighted: the reference scenario, 500k average trade at 3 bps requires ~2,200 trades for 1M USD revenue.

Why this pricing works for the partner bank

- **The fee is a fraction of the markup saving.** The bank captures the rest through capital release and revenue-share. The corporate captures it through a tighter quote.
- **Volume is the lever.** 3 bps on a 500k average ticket across the segment's 1-2 trillion of addressable notional produces material revenue.
- **No take-rate on the dealer spread.** The bank retains its rate-desk spread. The platform fee is additive, not extractive.
- **The bank is not disintermediated.** Block Margin collapses the operational and capital cost sitting between dealer and client. The dealer relationship and revenue stay intact.

ROADMAP

From live testnet to bank pilot to *mainnet* in four quarters.

The protocol is product-ready for 3-month SOFR FRAs and Synthetic Futures today. The next four quarters widen the instrument set, harden the integration layer for bank treasury systems, and move from a controlled testnet to a mainnet launch with one or two pilot banks.

NOW · Q2 2026

Testnet hardening

- Full lifecycle for 3m SOFR FRA and Synthetic Futures on Preview.
- Oracle committee expanded, M-of-N threshold signing live.
- Risk-engine methodology documented and third-party reviewed.
- Shortlist of partner banks engaged for pilot discussions.

Q3 2026

Bilateral pilot

- One to two partner banks, with one to two corporate counterparties at each.
- Bank-rail bridge for collateral movement, replacing testnet stablecoin.
- Treasury-system API integration with pilot banks.
- First real trades settled on-chain.

Q4 2026

Instrument expansion

- Compounded-SOFR IRSs live; swap lifecycle event model complete.
- FpML and EMIR-RTS regulatory reporting extract.
- Pilot extended to additional partner banks.

Q1 2027

General availability

- Open pilot to additional bank partners.
- MarginDEX testnet launch: AMM-based execution for corporates without an active bank hedging relationship (planned for testnet).
- Cross-currency swap support scoped.
- Privacy layer (Midnight or equivalent) for sensitive trade terms.

Milestones we will measure ourselves against

- **1,000+ testnet trades settled end-to-end.** Already achieved in Q1 2026.
- **First bilateral bank-corporate pilot trade on mainnet.** Target Q3 2026.
- **100+ real trades across 5+ corporate counterparties at one partner bank.** Target Q4 2026.
- **Third-party risk-engine validation.** External review by a Big Four firm or specialist model risk consultancy.
- **Independent smart contract audit.** Cardano-native or multi-chain audit firm with banking sector experience.

SECTION 10

10

Built by people who have run rate books, stood up stress-testing programs at regulated banks, and operated validator infrastructure on public blockchains since 2020.

THE TEAM

Built by people who have *run rate books.*

The Block Margin team combines front-office rates trading, regulatory stress testing, capital-markets advisory, data science, and banking regulatory delivery. Three of the four principals currently hold senior advisory roles at a leading management consultancy or NatWest.

Dmitry Shibaev

FOUNDER

20 years across front-office rates trading, regulatory stress testing, and on-chain infrastructure. Models worked: VaR, SVaR, IRC, DRC (FRTB), CVA, inflation-linked, SABR. Led NatWest Markets' response to Bank of England and EBA stress tests.

Tony Woodhams

BUSINESS DEVELOPMENT

EMEA Head of Capital Markets at a leading management consultancy. 14+ years heading capital-markets and risk advisory practices at Big Four firms. Senior advisory mandates at Morgan Stanley, HSBC, Credit Suisse, and KPMG covering trading risk, regulation, and front-office transformation.

Paulo Rosario

DATA & AI

Data science and quant executive across regulated indices, asset management, and AI platforms. Built derivative-index production pipelines for an LSEG MTF and quant models for M&G's investment desk.

Sergio Rodrigues

REGULATION & COMPLIANCE

20+ years delivering Basel, capital, regulatory reporting, and liquidity programmes at RBS, ABN AMRO, ING, and NatWest Markets. Current engagement with NatWest Commercial and Institutional in Amsterdam.

WHAT THIS TEAM BRINGS

Block Margin is designed to meet the standards these people already apply in their day jobs: running a rates desk, leading an EMEA capital-markets practice, building regulated indices, and delivering Basel programmes inside tier-one banks.

WHY DYNAMIC STRATEGIES

The *right mix* of rates-desk experience, regulatory depth, and on-chain delivery.

01

Product knowledge

Decades of hands-on experience with FRAs, swaps, FX forwards, and their margining and collateral workflows at large investment banks. We know what a dealer ticket needs, what a treasurer's hedge effectiveness report requires, and how an operations team reconciles a book.

02

Regulatory literacy

Direct experience running ICAAP and ILAAP programmes, delivering the first regulatory stress test for a major UK bank's investment-bank arm, and engaging with Bank of England, EBA, and FINMA on stress design. Block Margin is built with Basel III CCR, CVA, LCR, and NSFR as input constraints, not afterthoughts.

03

Smart-contract delivery

Live Plutus validators in production since 2022. Validator node operators on six Layer 1 and Layer 2 chains. Migrated production code between smart-contract languages (Marlowe to Aiken). We have shipped on-chain finance, not written about it.

04

Proven track record

We have shipped innovative blockchain solutions that actually work: GPS-anchored smart contracts used at live public events, open-source tooling used across the Cardano ecosystem, and a public GraphQL API serving downstream builders. Block Margin inherits the same engineering and operational culture.

Governance and institutional posture

Dynamic Strategies is registered in Gibraltar. The team is active in Cardano governance through Dmitry's role on the Intersect MBO Budget Committee. The firm operates validator infrastructure, provides liquidity on AMM DEXs, and advises regulated financial institutions through a leading management consultancy.

> *After a decade inside a rates desk and another half-decade building on-chain, the thing that jumps out is how much of the bilateral workflow is wasted effort that nobody has replaced.*
>
> DMITRY SHIBAEV

APPENDIX A

Terminology.

Term	Definition
CET1	Common Equity Tier 1. A bank's highest-quality regulatory capital, expressed as a percentage of risk-weighted assets.
CSA	Credit Support Annex. The appendix to an ISDA Master Agreement that governs collateral between counterparties: eligible collateral, haircuts, thresholds, minimum transfer amount, and valuation.
CVA / FVA	Credit Valuation Adjustment: expected loss from counterparty default. Funding Valuation Adjustment: the cost of funding collateral / margin requirements. Both are reserves or capital charges that flow into derivative pricing.
FRA	Forward Rate Agreement. A contract to lock in an interest rate for a future period on a reference index (e.g. 3-month SOFR).
IM / VM	Initial Margin (collateral posted up-front against potential future exposure) and Variation Margin (collateral movements to settle changes in mark-to-market).
ISDA	International Swaps and Derivatives Association. The ISDA Master Agreement is the standard legal framework for OTC derivatives.
LCR / NSFR	Liquidity Coverage Ratio / Net Stable Funding Ratio. Basel III liquidity rules that require banks to hold high-quality liquid assets and stable funding against outflows.
MTA	Minimum Transfer Amount. Under a CSA, the minimum size of a margin movement below which no transfer is made.
Netting	The offsetting of positive and negative positions between the same counterparties into a single net obligation. Enforceable netting is a precondition for capital efficiency in bilateral derivatives.
OIS	Overnight Index Swap. A swap of a fixed rate against a compounded overnight index (SOFR for USD, ESTR for EUR, SONIA for GBP). Used as the discount curve for collateralised derivatives.
Oracle	In this document, a trusted (or decentralised) source of off-chain market data published on-chain. The Block Margin oracle publishes the SOFR tenor array via a threshold-signed committee.

Terminology, continued

Term	Definition
RWA	Risk-Weighted Assets. Bank assets weighted by credit, market, and operational risk. Capital requirements under Basel III are expressed as a percentage of RWA.
SIMM	Standard Initial Margin Model, developed by ISDA, used to calculate initial margin for non-cleared bilateral derivatives under UMR.
SOFR	Secured Overnight Financing Rate. The primary USD risk-free benchmark, published by the NY Fed, replacing USD LIBOR.
Stress testing	Regulator-mandated scenario analysis (e.g. Bank of England ACS, EBA EU-wide, Fed CCAR/DFAST) that evaluates a bank's capital adequacy under adverse macro conditions.
UMR	Uncleared Margin Rules. BCBS/IOSCO-driven rules requiring IM and VM on non-cleared derivatives between in-scope counterparties.
UTI	Unique Trade Identifier. Used for regulatory trade reporting under EMIR, Dodd-Frank, and MiFID II. On Block Margin, the UTI derives from the transaction hash and output index.

Document status

This briefing is prepared by Dynamic Strategies for the purpose of institutional discussion with prospective banking partners. It is not an offer to sell securities, a solicitation, or a regulated financial promotion. All numbers are indicative unless otherwise cited. The live testnet described in Section 07 is open for evaluation only and does not constitute a regulated trading venue. References to specific regulatory frameworks (Basel III, EMIR, Dodd-Frank, MiFID II) are included for context; the applicability of any framework to a production deployment is a matter for each partner bank to determine with its supervisor.

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NEXT STEP

Block Margin

Let's *walk through* the testnet together.

We would welcome a working session with your rates, credit, operations, and technology teams. A 60-minute walkthrough of the testnet, the architecture, and a scope discussion for a controlled pilot is the natural next step.

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