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PEGISAI GLOBAL HOLDINGS

The Alkaimi Financial Ecosystem in Function

Granular Value on a Neutral Rail

Intellectual Property Notice:

The instrument, the platform and the operations described in this document are protected by a portfolio of patents held within the group. Foundational priority extends to April 1997.

Foundational filings protections confirmed by the United States Patent and Trademark Office in 2019, and the technologies have been continuously developed therefrom.

Each generation of that development is held under its own filings, whose terms run from their own dates under *35 U.S.C. 154(a)(2)*.

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This document records a verification run. It does not describe construction, and publication of it grants no license, right or permission of any kind.

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NOTICES

Not an investment, and not offered for speculation.

The Digitized Tangible Asset (DTA) described in this document is a settlement instrument. It is not offered as an investment, is not designed to appreciate, and carries no yield, coupon, distribution or return of any kind. It is not traded on any venue, no venue quotes it, and nothing bids on it.

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The results recorded in this document were obtained under the conditions described, using the data identified at the point of use, across the windows stated. They describe what occurred in those windows. They are not a prediction, a projection, a guarantee or an assurance of any future result.

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Terms used in this document.

Verification run. The demonstration this document records: ten stacks executed against captured official rate data across historical windows from 2021 through 2026, demonstrating the lock under the recorded conditions of those years. The mechanism verified here is the mechanism entering institutional service.

Digitized Tangible Asset (DTA). A bearer instrument holding whole recognized value in a fixed quantity of universal value units, insured at issuance, settling with finality on transfer, and transmutable to any script currency at a licensee bank's desk without the value moving. One verified asset is recognized into one stack; the stack's universal value units are combined into uniquely issued instruments; a DTA is one instrument of that stack, segregated in all aspects from every DTA issued outside its stack.

Stack. The container of one engagement. One stack holds one verified asset; the asset's total value is segregated into that stack alone; within the stack the recognized value is assembled into universal value units and combined into individual instruments, a bounded and specific quantity, insured as a unit. Each stack is independent of every other, and nothing crosses between stacks.

Segregation; segmentation. Two operations, kept distinct, and each occurs at more than one level.

> Segmentation divides a larger whole into parts that can be treated separately. It occurs first at the asset, where a portion is carved out of a greater holding: a series of wells from a field, a block from a deposit, a lot from a warehouse position. It occurs again inside the stack, where the recognized value is divided into individual instruments. It also occurs between similar commodities, where two grades or classes of the same material are treated as separate parts rather than one.
>
> Segregation isolates a segmented portion so that it stands alone. Once segregated, that portion is recognized on its own, its value is walled into its own stack, and nothing crosses between that stack and any other.
>
> The order matters. Segmentation selects what is to be recognized. Segregation isolates it. Recognition then assembles the recognized value into universal value units and combines them into instruments. One field may therefore give rise to several stacks, each recognized separately, each independent, and each carrying a value arrived at on its own facts.

Value grain. The fixed unit of value on which the system is built. The grain's value is fixed and everything else in the system floats around it, so the only question ever asked

of an asset is how many universal value units it holds. The grain does not move, is not priced, and has no currency value at any point in its life.

Granular value. What an asset's worth becomes when it is recognized rather than priced. The recognition is taken once, at creation, in a unit that does not move, and from that instant the asset's worth is a quantity rather than an opinion. Recognized value is held in universal value units and never in a currency.

Universal Value Unit (UVU). The universal benchmark of value: a fixed quantity of value grains, the same for every asset, into which recognized value is assembled at recognition. A UVU of one asset equals a UVU of any other, and the UVU does not move while every currency moves around it. It is the unit in which recognized value is held and moved.

Universal Value Adjustment (UVA). The quantum. It is the atomic unit of value measurement inside the Alkaimi Financial Ecosystem, resolved to one part in ten to the twenty-fourth of the lowest denomination of value in trade. It is indivisible, has no sub-unit beneath it, and is the terminus of every descent. One grain is exactly ten to the fifteenth UVAs. The full definition of the measure is published in The Instrument and the Measure.

Expression. A DTA is never expressed in currency figures while it is held. When currency is required, the equivalent value is delivered from the retained value within the DTA at a licensee bank's currency desk, as a final settlement, and the retained value leaves the ledger.

Transmutation. The conversion of a holding into a fiat currency, performed through a licensed bank at an instant of the holder's choosing. Transmutation is a currency event; the locked value is not repriced by it.

Underwriting; surety. Insurance embedded inside the creation event, before any instrument exists, at the highest surety class, covering the named assets of the particular stack. Coverage is a contract on named assets, not a promise over a blend.

Pooling model. The prevailing structure of finance, named here for contrast: common pools of assets in which the holder owns a fraction of a blend, value is averaged, and the weakest member's risk propagates to all. Alkaimi does not pool.

Pool magnitude. Pool magnitudes are stated in United States dollar equivalent throughout this document. The reason is the dollar's world reserve currency status: as *Section 11.6* records from the *Bank for International Settlements,* the dollar stands on one side of 89.2 percent of global foreign currency turnover, which makes it the currency into which typical trade converts and the one scale on which ten stacks

entered through five different currencies can be compared on a single page. The dollar is a reporting convention in these figures and is not a term in the mechanism. Each stack's entry currency and entry amount are stated separately, and the grain count locked at creation references neither.

Recognition. One stage of a named chain, not the chain itself. Recognition establishes the whole value of an asset and assembles it into universal value units. It does not underwrite, does not issue and does not deliver, and those are separate operations performed by separate parties. Where this document uses the word alone it means the stage.

Whole value. The entire worth of an asset, established at recognition and assembled into universal value units. A fraction of PV-10 or of a cut net present value is a fraction of a discounted derivative, not a fraction of whole value.

Smart contract. A computerized transaction protocol that executes the terms of a contract, as defined by Nick Szabo in 1994. The objectives of the design are to satisfy common contractual conditions, including payment terms, liens, confidentiality and enforcement, to minimize exceptions both malicious and accidental, and to minimize the need for trusted intermediaries. Alkaimi uses the term in that original sense and in no other. Alkaimi does not use blockchain or similar distributed-ledger technologies, because of their inefficiency, their lack of security and their lack of relevant functionality. No Alkaimi monetary mechanism moves outside the Alkaimi ecosystem.

Alkaimi’s value recognition method. The complete chain by which an asset’s value becomes instruments in a holder’s possession. Recognition establishes the whole value. The underwriter then signs a ratio of that value. The Mint then issues a ratio of it, and the balance stands unreleased in the ledger. Where this document compares pathways to liquidity, the method is the pathway and the long form is used, because the short form would attribute three operations to one of them.

The Mint. The issuing discipline of the ecosystem. It issues a ratio of the recognized value rather than the whole of it, and the withheld balance is released later against a record. The Mint therefore performs a rating function at the moment of issuance rather than an agency performing one afterward.

Discipline ratio. The proportion of a recognized value that the Mint issues. It is set below the whole deliberately. A first-time issuer never issues against the entirety of what he owns, and the remainder stands unreleased in the ledger as cover.

Liquidity. The capacity to spend, settle and fund obligations now rather than when an asset can finally be sold. Under Alkaimi’s value recognition method liquidity is

created at recognition and issued at the Mint's discipline ratio, and the liquidity is held value rather than a claim on a bank.

Formation; maintenance. The two costs of a DTA position, stated in this document as functional ranges rather than as a fee schedule. Formation is paid once, at creation. Maintenance is paid annually, and the annual fees are the whole of the maintenance obligation. Section 8.4 states the ranges.

The ledger. The third component of the ecosystem, and not a function of the other two. It records every recognized value and writes every residual whole at the instant it arises, so squaring is a property it cannot lose rather than a reconciliation performed at intervals. Administration never touches those residuals, no operator earns them, and no holder carries them.

Parity. Identical universal value units in every instrument of every stack in the system. Parity is created at recognition, in the assembly of universal value units, and every instrument carries it; it is what allows an instrument issued against one asset to settle against an instrument issued against another, whatever the two assets are.

DTA settlement. Settlement performed in DTAs rather than in a currency. What passes between two holdings is a whole number of instruments, each carrying the identical universal value units parity fixes, so the quantity settled is a quantity of instruments and no currency enters the movement.

> DTA settlement and transmutation are opposite operations rather than variants of one. DTA settlement occurs inside the ecosystem, between holdings, and no currency enters it. Transmutation occurs at the boundary, where a holding is converted into a fiat currency through a licensed bank at an instant of the holder's choosing.

Reference instant. The single moment against which every window in this document is measured: 16 July 2026 at 1200 New York time. Every stack runs from its own creation to this instant, and every figure described as being at the close is taken here.

Neutral basis. The presentation used for currency movement in this document. Each currency is measured against the geometric mean of all five, so no currency serves as the ruler and none is privileged. The neutral basis is a presentation device only. The DTA itself is basis free, and the pairwise movements quoted in the narratives depend on no basis at all.

Price level. The general level of prices in one economy, published monthly by a statistical authority as a consumer price index on a stated base. It is the measure of

what a unit of that economy's currency buys. Movement in a price level is common to every holder of that currency and is removed from the neutral basis by construction, which is why the charts in this document cannot show it and the tables do.

Purchasing power. What a holding can buy, as distinct from what it is worth in another currency. A position measured in purchasing power is its nominal amount adjusted by the price level of its own economy across the holding period. Every purchasing power figure in this document is an index ratio for a position as held, and none is a return.

Debasement. The loss of a currency's purchasing power when the supply of the currency expands faster than the economy behind it. Each unit carries a smaller share of the same real output, prices rise, and the rise is reported as inflation. The cause is the unit.

Fractional reserve banking. One of the two historical monetary models. A fractional reserve institution lends against a fraction of the reserves standing behind its liabilities, and the lending creates liquidity. Without diligence, management and discipline the model debases the currency.

Full reserve banking. The second historical model, written by its advocates as one hundred percent reserve banking. A full reserve institution holds reserves equal to the whole of the claims against it, solvent by construction and historically unable to create liquidity. This document uses the term only in historical and regulatory contexts.

Whole reserve. Whole reserve. The name this document gives the restored model, taken from what the reserve holds rather than from a coverage ratio: one hundred percent whole value. The reserve behind an Alkaimi licensee is recognized value held whole in its own DTA stack, held in universal value units. Section 8.5 states the standard the liquidity meets and Section 11.5 states the restoration.

Basel III+. The Basel Committee's completed post-2008 bank standard, in effect for most member jurisdictions from 1 January 2023 and not implemented by the United States. Under Basel III+ a bank's modeled risk cannot fall below 72.5 percent of the standardized calculation, operational risk is capitalized on the standardized approach, and the trading book is capitalized under the Fundamental Review of the Trading Book. Section 7 carries the record.

Level 1 High-Quality Liquid Assets (HQLA). The strictest liquidity class under Basel III+, the class reserved for central bank reserves, counted without discount. The DTA categorizes as Level 1 with no applied discount.

Absolute payment standard. The Bank for International Settlements' settlement standard: settlement final, irrevocable and unconditional. The Digitized Tangible Asset met the standard in the second quarter of 2022, the first privately created instrument to meet the same standard central bank instruments meet.

Commodity dependent nation. A nation that earns most of what it sells abroad from raw materials. UNCTAD sets the line at more than 60 percent of merchandise export value, in energy, mining or agricultural products, and its 2025 survey counts 103 nations above it.

Reserve-based lending. A revolving facility advanced against a fraction of PV-10 on proved reserves, redetermined at intervals at the lender's discretion, with a mortgage over at least 70 percent of the properties and the remainder reserved to the lender. One of the four structures a commodity holder is offered.

Borrowing base. The ceiling on a revolving facility, set by the lender against collateral it values itself. In reserve-based lending the collateral is proved reserves. In commodity trade finance it is inventory and receivables. The base is recalculated at intervals and the lender is under no obligation to set it at any particular amount.

Advance rate. The proportion of a valued collateral pool against which a lender will actually lend. An advance rate of 60 percent on inventory means the lender advances 60 units against a hundred units of assessed value. Where the assessed value is itself a discounted figure, the advance is a fraction of a fraction.

Redetermination. The periodic recalculation of a borrowing base, typically twice a year and often permitted at other times at the lender's discretion. If the recalculated base falls below the amount already drawn, the borrower faces a deficiency and must repay the difference within a short cure period.

Encumbrance. A charge over an asset that limits what its owner may do with it. A mortgaged reserve cannot be sold, processed into another product, pledged again or brought forward into a second financing while the charge stands. Encumbrance is the cost that appears on no term sheet.

Offtake. A commitment to deliver production to a named buyer. Where a financing carries an offtake obligation, the borrower does not choose who buys his output for the term of the agreement, and the financing and the sales channel are the same contract.

Prepayment. An advance against future production, repaid in delivered commodity rather than in cash. The financier pays now and takes barrels or tons later. Prepayment agreements commonly carry an offtake obligation and coverage ratios tested against a discounted forward price curve.

Streaming. Not a loan. A sale of a share of future production for the life of the asset, in exchange for an upfront deposit. The financier pays a fixed fraction of the prevailing price for each unit delivered, and the delivery obligation continues after the deposit has been exhausted.

Commodity trade finance. A facility advanced against inventory and receivables at mark to market, under an independent collateral manager, with title assigned, accounts controlled and swept, and hedging mandated as a condition of drawing. One of the four structures a commodity holder is offered.

PV-10. The present value of estimated future net revenues from proved reserves, after production, development and abandonment costs, discounted at ten percent, at a price deck the reporting party specifies. Issuers state in their own filings that PV-10 does not purport to represent the fair value of their reserves.

Forward strip. The set of prices at which a commodity can be sold for delivery at future dates, read from traded contracts. Financings sized against a forward strip commonly apply it at a discount, so a coverage test computed on eighty or ninety percent of the strip is a reduced figure before any other haircut is applied.

Coverage ratio. A covenant requiring that the value of pledged assets, or of expected future deliveries, exceeds the amount drawn by a stated multiple. A coverage ratio of one hundred and fifty percent caps drawings at two thirds of the covered value, and that covered value is usually itself a discounted figure.

Free and fair trade. Two parties who agree an exchange can complete it. Neither the price nor the terms are set by anyone outside the transaction, and no party who is not in it can prevent it. The term as used here is mechanical rather than political. It refers to the ability of a transaction to complete, and it carries no position on tariffs, quotas, protection or trade policy of any kind.

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Overview

Throughout history there have been two monetary models: fractional reserve banking, and full reserve banking, which its advocates also wrote as one hundred percent reserve banking. This document names the second model by what its reserve holds rather than by its coverage ratio: one hundred percent whole value (hereinafter, whole reserve).

Whole reserve is the preferred model. A whole reserve institution holds the value itself, and the institution is solvent by construction. Historically, the model carried one defect: the model could not create liquidity.

The recognized problem

Fractional reserve banking can create liquidity. Without diligence, management and discipline, fractional reserve banking debases the currency, and the debasement is reported as inflation.

In 1913 the United States by law, created the Federal Reserve System, the institution of the fractional reserve doctrine. In August 1971, the United States government, under a decree from President Richard Nixon, temporarily suspended the dollar's convertibility into gold. Through 11 presidential administrations, this temporary suspension has never lifted. Due to this failure, since 1971, currency debasement stopped being a policy risk and became the operating state.

Nixon's temporary suspension was required to stop a trend that had existed since 1963. After the 1944 Bretton Woods accords, the world settled its trade on the dollar for two reasons:

1. the United States was trusted to be fair and neutral in trade, and
2. the dollar was redeemable in gold at 35 dollars an ounce.

From 1963 through 1966, France converted its dollar reserves and moved more than 3,300 tonnes of gold from New York and London to Paris. Other nations followed, and in August 1971, when France and Britain presented further dollars for conversion, the United States closed the gold redemption window. After the gold redemption closure, the dollar kept its place on trust alone.

Trust ended as policy on 26 October 2001, when the Patriot Act's Section 311 gave the United States Treasury the power to sever any foreign bank or jurisdiction from the dollar system on suspicion rather than on proof. The Treasury demonstrated this power accordingly:

1. a Macau bank severed in 2005 to intimidate every other bank,

2. Iranian banks cut from settlement messaging in 2012,
3. and in 2022, a G20 central bank's reserves frozen by the issuers of the currencies the reserves were held.

The one assurance that survived 1971, that the issuer always pays and related trust was permanently eroded. The former neutral dollar rail had lost its neutrality, and the rail, as well as the us dollar became increasingly weaponized.

After the gold redemption window closed, the currency debasement issue spread. Each currency's loss since 1971 can be measured by its own issuer's index, from each currency issuing nation's own modern starting point. Four of the world's five leading currencies, the dollar, the yen, the pound and the yuan, retain less than a third of the purchasing power they held in or near 1971, with some holding drastically less. The youngest of the five, the euro, has lost more than two fifths since its 1999 creation.

The causes of the loss in currency purchasing power are public conduct, and each cause was a political decision taken because austerity was the alternative:

a. deficit spending monetized through central bank purchases,
b. the balance-sheet expansions after 2008 and 2020,
c. sustained negative real interest rates,
d. credit expansion multiplying the money supply,
e. and debt service compounding the borrowing itself.

The scale is public too. United States federal debt stands at 39.8 trillion dollars as of July 2026, on the Treasury's own daily count. Global debt stands at a record 348 trillion dollars, 29 trillion of it added in 2025 alone, on the Institute of International Finance's monitor. Every unit of both is denominated in the currencies this Overview has just measured.

The solution is stated as directly as the problem.

Whole value must be infused back into the banking and trade systems, ideally from assets the fractional system is unable or unwilling to properly utilize.

Alkaimi's innovative solutions and operating network

The world's pool of viable whole assets is sufficient to not only correct these problems, but to replace fractional and fiat structures that produce them.

Alkaimi estimates 4 quadrillion United States dollars of assets viable for use:

1. assets for which a market exists,
2. demand will exist, and

3. value must be created to transact.

Section 11.5 carries the arithmetic. Alkaimi either combined or invented the technologies, the laws and the processes necessary to lawfully, globally and successfully accomplish the required tasks.

Alkaimi, after years of development, invented and deployed a new value recognition method, and Alkaimi's value recognition method creates liquidity that operates inside the whole reserve model. Granular value is what an asset's worth becomes when it is counted rather than priced. The count is taken once, at creation, in a unit that does not move. From that instant, the asset's worth is a quantity rather than an opinion, and it can be held, moved and settled as one.

Alkaimi utilized this unique and innovative value recognition method to create the *Digitized Tangible Asset (DTA)* which is derived from its own patent inventory confirmed in 2019 by The United States Patent and Trademark Office. Since 2021, Alkaimi has been running confirmation tests on its operating systems, value recognition methods and other required technologies. This document is the record of the granular value test, as well as granular value's usage for settlement and value retention. In 2022, *The Digitized Tangible Asset* met the *Bank for International Settlements' absolute payment standard* and became the underlying value transfer mechanism for its global network of independently operated, licensed regional retail banking partners.

The operational neutral rail financial ecosystem

On 1 September 2026, Wholesale Settlement began on Alkaimi's global financial ecosystem.

- Services are provided by Alkaimi licensed operating retail banks. Alkaimi's independently but cooperatively operating walled garden network of regionally regulated banks operates across 14 countries.
- Alkaimi's value recognition operations, DTA creation, and global ledger are administratively managed by the Pegisai group of companies operating administratively within the walled garden's core.
- The regulated and regionally operating licensees are the only points where the ecosystem meets the existing global financial system and Pegisai's roles are in support of their global operations.

Alkaimi's designers recognized the global requirement for a fair, neutral and trustable value creation, value storage, and value transmission system.

Global trade requires a neutral system

In facilitating this neutral design philosophy, Alkaimi's granular value methodology is currency neutral, meaning value is not derived from the easily manipulated measures or methods of pricing (currencies) but from the asset's whole value, counted.

Because the Universal Value Unit and the Digitized Tangible Asset (DTA) monetary mechanism are not currency tied, the Alkaimi rail itself remains neutral.

- A holder's self-stated currency denomination enters the value creation only as a one-time input.
- Alkaimi's value recognition method reads that currency-stated valuation across all known currencies at the same instant, dissolving any single issuer's measure, and the Mint's physical verification corrects the result.

The recognized value references no currency: not the entry currency, not the entry amount, and not the reference read.

Any conversion of value into a currency, whether after a transfer, after creation or out of a holding, is conducted at the licensee ring, where the ecosystem meets the existing financial system, and no currency progresses past that layer. This preserves the neutrality of the rail and of the ecosystem, by construction, for trade and for value recognition.

Within this document:

1. *Sections 1 through 4* are granular value created and held, across ten assets and five and a half years.
2. *Section 5* is granular value moving between holders, audited on both sides of every movement.
3. *Sections 6 through 8* are the neutral rail the value moves on, the liquidity the system creates and what that liquidity costs, and what the alternative costs the party who uses it. Section 9 carries the worked example.
4. *Section 10* states Alkaimi's rights, protection and status.
5. *Section 11* states what the record restores: whole reserve banking, returned with the one capability the model never had, the creation of liquidity.
6. *Section 6* sets out the ecosystem's design and current layout.

Alkaimi's innovative resolution restores one hundred percent whole value reserves and liquidity into the monetary and financial systems of the world. Our goal is to reverse the debilitating effects of fractional reserve models, and fiat created currencies while empowering global commerce, free trade and consumer level wealth retention.

1. The whole value review.

1.1 Why the recognized value cannot move.

The count is fixed at the instant of creation and never repriced afterward. No venue quotes an instrument. Nothing bids on one. There is no market in which an outside price could form and no mechanism by which one could reach the count if it did.

That is a property of the construction rather than a result of the run. The currency movements in the ten sections below are not a test the recognized value passed. They are evidence of the exposure the recognized value never carried.

This is stated here once. The ten sections do not repeat it.

1.2 What is held and what is expressed.

Recognized value is held in universal value units and never in a currency. The grain is fixed and everything else in the system floats around it, so the only question ever asked of an asset is how many universal value units it holds.

Recognized value is assembled into universal value units at recognition, and the universal value unit is the same for every asset. Beneath the universal value unit sits the value grain, the fixed point, and beneath the grain the Universal Value Adjustment, which balances the ledger and beneath which no sub-unit exists.

Every instrument in the system carries the identical quantity of universal value units, the same across every stack. One verified asset is recognized into one stack, and the stack is combined from its universal value units into uniquely issued instruments. A DTA is one instrument of that stack.

The DTA is a bearer instrument, so possession of it is title to the value it carries. Every holder is nonetheless known to the ledger at every instant, which is what separates the bearer function from anonymity.

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2. Formation of a DTA.

Alkaimi's Value recognition method establishes the whole worth of a viable asset reserve as usable value while the reserve remains in the ground, fully owned by the state, unsold and unencumbered. The method does than and nothing else, and no instrument, market or lender has done it before Alkaimi.

Alkaimi's value recognition method values an asset that is physically present rather than marking a value against the last asset sold.

It is imperative to understand the significance of this methodology and what it produces:

1. **Recognition is the entry point for every asset on earth that can be measured:** a reserve, a field, a deposit, a cargo, a plant.
2. **Part of the recognition process creates a universal benchmark of value.** This new benchmark allows the direct exchange of value without any form of conversion, currency, tax or legal impediment.
    a. Recognition of value, and the uniform benchmark it creates, is crucial to understand.
        - Because every commodity, every currency, every other current form of payment, and every asset or item revolves around this one new universal benchmark point.
        - This universal value point "prices" all forms of currencies, commodities and other tangible assets in universal value units, enabling the direct exchange of value between any two recognized asset classes, and leaves speculation on asset reserves no venue, because no grain is quoted and nothing bids on one.
3. **Recognition processes provide the foundation for the creation of the Digitized Tangible Asset (DTA).**
    a. The DTA is universally transferrable as a wholly contained monetary mechanism utilizing smart contract features.
        - A DTA, as a monetary mechanism, is a complete transfer of value that meets the Bank for International Settlements absolute payment criteria.
4. **Recognition is how value gets onto Alkaimi's global ledger.** Once created instruments are ledgered, the value can be transported, held, exchanged and settled.

Recognition is the first step in the series of processes that gives a commodity dependent nation an independent pathway to economic sovereignty.

A nation using Alkaimi's value recognition method gives a portion of an asset reserve to create a DTA stack and pays an annual fee to maintain the monetary mechanisms created from its committed assets. In return the nation gets liquidity that does not decay, does not mature, and does not require the asset to be sold. This section sets out both sides.

Mobilizing a portion of the reserve

A commodity-dependent nation does not bring its whole reserve. The nation brings a portion: a series of wells from a field, a block from a deposit, or a defined tonnage from a stockpile. This portion of asset reserve is then recognized at whole value using Alkaimi's processes. The rest of the nation's asset reserves stays in ordinary production, untouched and unencumbered by the recognition.

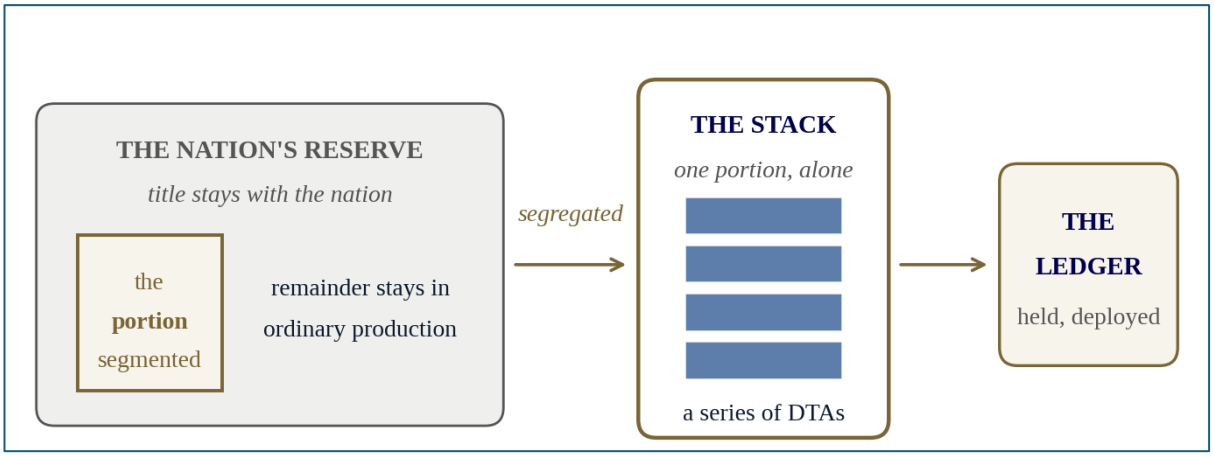

Figure 2.1. The portion, the stack and the ledger. Title stays with the nation, the remainder stays in production, and nothing crosses between this stack and any other stored value of the same commodity.

Segregation and segmentation

The nation's assets brought forward for Alkaimi value recognition is segmented from the nation's greater commodity asset holdings and then segregated into its own DTA monetary mechanism stack. The DTA stack holds that asset portion alone. The nations asset's now recognized value is underwritten and divided into its own series of DTA instruments.

Nothing crosses between this unique DTA stack and any other DTA stack. A DTA stack built on one nation's commodity asset field is independent of a DTA stack built on the nation's next field, and is independent of DTA stacks issued using another nation's

similar commodity-asset that has been recognized and is independent of every other stored value anywhere in the ecosystem. The whole recognized value is locked in its own DTA stack and is never averaged, pooled, or exposed to the condition of any other holding whether that holding is a commodity or a recognized value held in DTA monetary mechanisms.

The lifecycle of the instrument

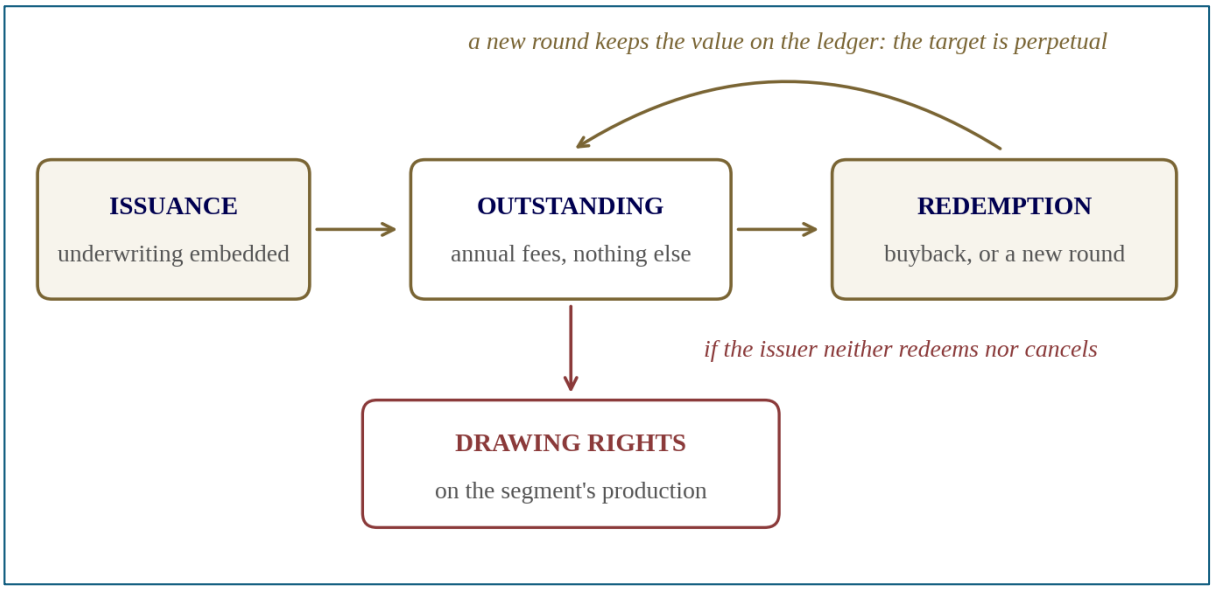

Figure 2.2. Issuance, maintenance, redemption, and what stands behind the DTA if the issuer does neither.

Issuance. The DTA monetary mechanisms are issued as a unique DTA stack containing whole value. Each DTA underwriting is rated at the highest surety class and embedded within the DTA during the minting process and this surety is smart contract embedded into the DTA itself, and accordingly each holder is the named payee party in the event of default.

Maintenance. During the issued DTA's lifecycle, and at all times while the DTA is outstanding, the issuer pays annual maintenance fees including underwriting costs. The issuer carries two obligations and no other: the annual fees during the lifecycle, and redemption or cancellation of the DTA at the end of it. No coverage ratio is tested and no borrowing base is redetermined during the lifecycle of the issued DTA.

Redemption. At the end of the DTA's lifecycle, the issuer redeems the DTA by buying back any used monetary mechanism, or by issuing a replacement DTA round against the same or expanded committed asset. The whole value retained on the ledger is capable of being perpetual and during this period the retained or utilized value stays

on the ledger and the asset is never sold to exit the monetary mechanism in so long as the issuer continues the maintenance obligations.

Drawing rights. Each issued DTA contains drawing rights against the production of the nation's asset segment behind them. If the issuer fails to redeem or cancel the instruments, the current DTA holder holds the right to draw on that production. However, in this event the surety position is released to the DTA holder and Alkaimi assumes drawing rights to correct the obligation against its ledger. Drawing rights are the basis of the underwriting and the surety is what functionally stands behind the issued and utilized DTA monetary mechanism. Accordingly, default recourse is to the underlying physical asset rather than to a national promise to pay.

What the nation keeps

Title to the whole reserve, including the segment in the stack. Production from everything outside the segment, on the nation's own schedule. Control, because no lender sets a base and no manager takes custody of the goods until the event of a default. The nation's own currency remains untouched and the nation's sovereign standing is increased. Additionally, because a sovereign does not require outside approval from any agency or central bank access is limited only by the sovereign's desire to proceed and Alkaimi's commitment to maintain a balanced and neutral ledger.

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3. Realization of whole value on the ledgered system.

3.1 The three components.

Everything shown to this point is the record of one instrument doing one thing. This section fixes the architecture around that instrument and then evaluates what the record proves.

Component one is the DTA, the Digitized Tangible Asset. It is a bearer instrument holding whole recognized value in a fixed quantity of universal value units, insured at issuance, settling with finality on transfer, and transmutable to any script currency at a licensee bank's desk without the value moving. Sections 4.5 through 4.14 are component one in function, ten times.

Component two is the operating platform. It is a global financial ecosystem built around a walled garden operating core. The core interconnects to a regionally diverse network of licensed bank holding companies, capped in number. Issuance occurs only through the licensed regional network via the central core. The format is standardized and the issuance process is regulated.

Component three is the ledger, and it is not a function of the other two. It records every recognized value and writes every residual whole at the instant it arises, so squaring is a property it cannot lose rather than a reconciliation performed at intervals.

Each DTA issued is isolated to one specific asset. Think of one oil field in the GCC. Not the entire oil holdings of the GCC and not the holdings of one GCC nation, and not necessarily the whole of that field either. One segmented portion. One issuance. One insured stack.

One boundary is stated plainly. The formula by which DTAs are created is proprietary and is not disclosed in this document. Nothing in this evaluation requires it.

Alkaimi's value recognition method provides a GCC nation with its first and likely most viable pathway to liquidity from its existing in-ground asset reserves.

Prior to Alkaimi's proprietary processes no asset reserve on earth had produced usable value before without leaving the ground, being pledged, or irrationally impaired. Additionally, no other process, procedure, or product has provided a larger amount of immediately mobilizable liquidity against the same asset, and none has done so without a sale into the commodity market.

Alkaimi efficiently derives value from resources the current system either ignores or dramatically taxes.

The existing financial system ignores every reserve that has not been sold. Due to this, the largest commodity asset a commodity-dependent nation owns is non-serviceable for liquidity and value transfer purposes. A traditional financial institution, within the fractional reserve banking system sees nothing to viable within their methodologies and system until a commodity asset is sold, or pledged. The same system dramatically taxes whatever commodity asset it does reach. Reserve-based lending, prepayment, streaming and trade finance each take title, output, control or price risk from the holder, on terms the financiers themselves document in their own filings.

Every one of the four financings available to a commodity holder takes something the holder cannot get back.

1. **Reserve-based lending takes control:** the borrowing base is the lender's to set at its own discretion and to reset at any time, with a mortgage over 70 percent of the properties and the remaining fifteen percent reserved to the lender.
2. **Prepayment takes the buyer:** all production for the term goes to the financier, so the state does not choose who buys its output for four years.
3. **Streaming takes the output itself:** 75 percent of the value of every ounce delivered, for 40 years, with loan covenants attached.
4. **Trade finance takes the goods:** an independent manager controls the inventory, and a price move unrelated to the asset produces a demand for cash.

Alkaimi's value recognition method takes none of them.

The nation’s asset reserve is recognized at its whole value. Alkaimi does not create a haircut, a discounted projection of the nation’s asset reserve.

Further a nation’s asset reserve remains intact, as it was before recognition. This newly derived value is interjected into Alkaimi's ledger for usage including capital formation, wholesale settlement, reserve holding and cross-border exchange. None of these require a currency inside the operation.

Alkaimi provides:

a. **Capital formation:** Alkaimi’s value recognition method creates a monetary mechanism that funds development from the state's own asset base. A state with ore in the ground and no smelter builds the smelter from the ore. The alternative is a bond repaid in a currency the state does not issue. Under Alkaimi's value recognition method that debt is never created.

b. **Wholesale settlement:** an obligation to any counterparty is stated in that counterparty's own currency. The obligation is counted in universal value units and extinguished in DTAs. The currency is met at the licensee and nowhere inside the ecosystem. Nothing is converted and no spread is taken.

c. **Reserve holding:** a position held in DTAs does not lose what it buys while it is held. Section 4 of this document measured ten holdings across windows running from 149 to 1,953 days. The recognized value moved 0.00 in every-one. 48 of the 50 currency positions held beside them lost purchasing power.

d. **Cross-border exchange:** the taking of recognized value (DTA) from a counterparty, via the walled garden ecosystem as payment for products, goods, services or assets across international boundaries. Value exchanged utilizes recognized value, so no currency, conversion or third part stands between the two. Each side receives equal value.

e. **Continuing value:** a DTA received, taken or issued is immediately usable again. The holder pays it onward to any other party in the ecosystem, holds it as reserve, or settles an obligation with it. The DTA passes from holder to holder without conversion, and the underlying asset never moves.

The liquidity produced from this recognition serves two purposes, and a nation may hold both at once.

Standby liquidity.

The instruments are held. The recognized value does not move while the instruments are held, so the position is a reserve that does not lose whole value, no matter currency market dynamics. A nation holding a currency reserve pays the price level on every currency unit movement for as long as the currency unit is held. A nation holding its wealth on Alkaimi's grain-based ledger only pays an annual maintenance fee and loses nothing, while defending its wealth from currency fluctuation.

Liquidity to be deployed.

The instruments are used. The DTA monetary mechanisms fund the nation's economic requirements from the nation's own asset base, settle obligations with counterparties in any jurisdiction, and pay for products, goods, services and assets, all without a currency inside the operation.

Two reasons a nation does this.

Economic development. A nation with ore in the ground and no smelter builds the smelter from the ore. A nation with a program to fund, funds the program against the reserve rather than against a bond repaid in a currency the nation does not issue. The

debt is never created, so there is no interest cost, collateral calls, and no refinancing expenses.

Wealth retention. A nation's holdings are exposed to the currency they are held in, in both directions. Under debasement the currency loses what it buys, and no hedge reaches the loss, because the hedge would have to be written against the same thing being held. Under deflation the nation's debts hold nominal while its income and the marked value of its commodity assets fall. A granular whole value position is exposed to neither, because the grain count is locked and not denominated in the moving currencies.

Case uses

The four cases below are stated generically.

	Low debt	High debt
Commodity dependent	The reserve is the standby position. A portion is mobilized, the instruments are held as a reserve that does not decay, and deployed for development at a moment of the nation's choosing rather than at a price set elsewhere.	The nation retires its own debt with instruments recognized on its reserve. The bondholder receives value in grains instead of a promise in a currency. A liability that carries interest, carries a maturity and grows heavier in deflation is exchanged for a perpetual instrument at an annual fee, and the reserve is kept.
Not commodity dependent	Alkaimi's value recognition opens on any asset that can be measured. State land, ports, utilities, infrastructure and state enterprises sit on no balance sheet at whole value. A portion is recognized and the instruments are held or deployed exactly as a commodity nation holds or deploys them.	The same assets retire the same debt. Where the debt trades below face, the debt is retired at a discount with value recognized at whole. Every non-petroleum asset class brought to the ledger is one the ledger needs beside petroleum-class value, so the nation supplies the balance that raises the ceiling for every other participant.

Table 3.1. The four case uses, stated generically.

4. The stack and hold test.

4.1 How to read the charts.

Each stack section carries a chart of its own window. Five colored lines show the five currencies. One black line shows the recognized value held in that stack, in universal value units.

The black line never moves. The colored lines always move. A holder who took the value in any one of those script currencies rode that colored line. A holder who took it in DTAs rode the black one.

One caution about the zero.

Two separate facts sit at zero on these charts and they should not be confused. The recognized value is at zero because it did not move. The mean of the five currencies is at zero because the neutral basis places it there by construction.

The recognized value and the currency mean coincide on the page. A value that did not move and a mean the basis placed at zero are not the same statement, and the chart does not prove the first by drawing the second.

4.2 What the charts cannot show.

The neutral basis subtracts the mean of the five currencies. Whatever the five did together is therefore removed from the chart before it is drawn. That removed component is the price level. If all five currencies lost purchasing power over a window, and they did, the chart shows none of it.

> A currency line reading plus four percent has not gained four percent. It has gained four percent relative to a basket that was itself falling against goods. The chart measures how the five moved apart from each other. It does not measure what happened to all of them together, and it cannot.

Each stack section therefore carries a second reading. The chart shows the dispersion. A table beside it shows what each position was actually worth at the end of that window, measured against the price level of that currency's own economy.

The chart and the table are both needed. Only the table carries the benefit to the holder.

4.3 The ten stacks.

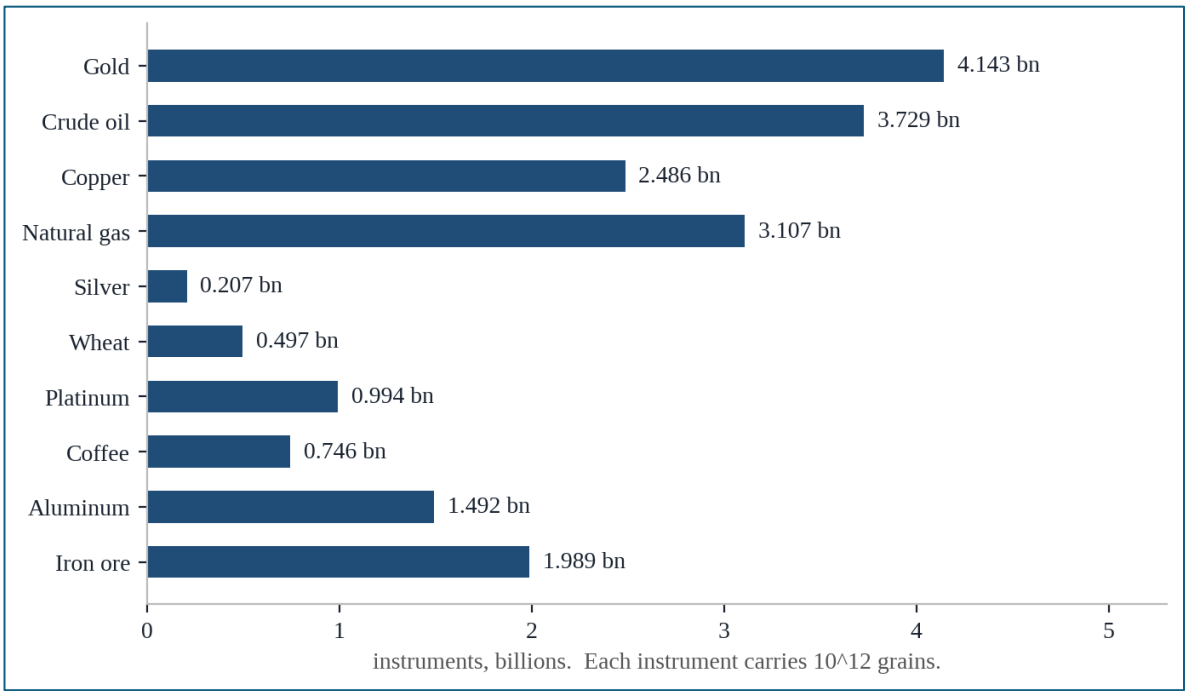

Figure 4.1. The ten holdings in instruments. The run carries 19,390,054,794 instruments in total, spanning 20 to 1 from the largest stack to the smallest.

Stack	Created	Unit	Quantity	Entry	Instruments
Gold	2021-03-11	Troy ounce, fine	2,411,306 ozt (75.00 t)	USD	4,143,174,102
Crude oil	2021-09-02	Barrel, stated API	51,070,265 bbl	RUB	3,728,856,691
Copper	2022-02-08	Metric ton, contained	250,011 t	CNY	2,485,904,461
Natural gas	2022-07-19	Million BTU	60,755,208 MMBtu	EUR	3,107,380,576
Silver	2023-01-24	Troy ounce, fine	8,719,885 ozt (271.22 t)	THB	207,158,705

Stack	Created	Unit	Quantity	Entry	Instruments
Wheat	2023-08-15	Metric ton, No. 1 HRW	2,059,454 t	EUR	497,180,892
Platinum	2024-04-09	Troy ounce, fine	1,057,525 ozt (32.89 t)	USD	994,361,784
Coffee	2024-11-21	60 kg bag, Other Milds	1,848,790 bags (110,927 t)	THB	745,771,338
Aluminum	2025-06-05	Metric ton, 99.5 percent	590,486 t	CNY	1,491,542,676
Iron ore	2026-02-17	Metric ton, FE63.5	19,697,158 t	RUB	1,988,723,569

Table 4.1. The ten stacks. Quantities derived at entry from the IMF reference for each commodity at its creation month.

4.4 The data behind every figure.

Every exchange rate comes from two independent official sources. The European Central Bank reference series supplies the euro, yuan and baht. The Central Bank of Russia official series supplies the ruble. Every observation is taken on the stated date.

Every price level comes from a national or international statistical authority. The Bureau of Labor Statistics supplies the United States. Eurostat supplies the euro area. The *Bank for International Settlements* long consumer price series supplies Russia and China. The Ministry of Commerce supplies Thailand.

The period was chosen because it contains the largest dislocations of the decade. The ruble runs from 56.56 to 101.04 per dollar across the ten creations. The European gas market is entered at its height.

THE TESTING SEQUENCE

4.5 Stack 1. Gold. Created 2021-03-11.

What was recognized.

The unit is the troy ounce of fine gold at stated fineness. The stack holds 2,411,306 troy ounces, which is 75.00 metric tons, against a pool of 4.1432 billion United States dollars entered through USD. The quantity is the pool at 1,718.23 dollars per troy ounce, IMF series PGOLD for March 2021.

The oldest stack in the run and the longest exposure window in the verification. 75 metric tons is the ordinary scale of one source pool under management rather than an aggregate of many.

The stack was created on 2021-03-11 at 1200 New York time. Underwriting at the highest surety class was embedded inside the creation event, before any instrument existed. The stack combines into 4,143,174,102 instruments, each carrying the identical quantity of universal value units.

The window.

Over the 1,953 days from this creation to July 16 2026, the net movements of the five currencies on the neutral basis were: USD +4.73 percent, EUR +0.34 percent, RUB -0.53 percent, CNY +0.36 percent, THB -4.67 percent. The widest spread between any two at the close was 9.39 percentage points. Inside the window the spread reached 48.42 points, at 2022-07-19.

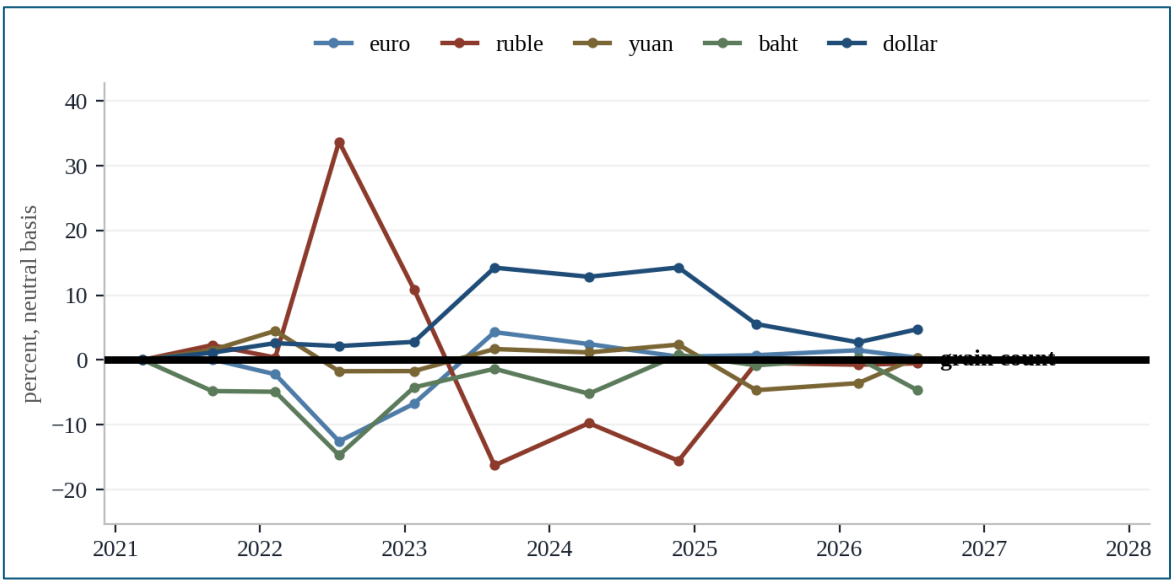

Figure 4.2. Gold. The five currencies on the neutral basis at every lock instant from creation to the reference instant. The black line is the recognized value held.

What this chart indicates.

The ruble line rises to plus 33.69 percent by July 2022 and falls to minus 16 percent by 2024. The dollar line climbs to plus 14 percent and returns. Neither of those is visible in the closing figures, which sit within five points of each other. A reader who saw only the endpoints would conclude the period was quiet.

The stack stood at 4,143,174,102 instruments at creation and at the identical figure at the reference instant. Every DTA in this stack exchanged at one for one against every DTA of every other uniquely issued stack at every joint instant.

The positions.

The chart above shows how the five currencies moved apart. It does not show what happened to all of them together. This table does.

Position held	Chart reading	Purchasing power at the close	What that means
In dollar	+4.73 percent	-20.68 percent	Reads as a gain, is a loss
In euro	+0.34 percent	-19.87 percent	Reads as a gain, is a loss
In ruble	-0.53 percent	-35.30 percent	Loss on both readings
In yuan	+0.36 percent	-2.72 percent	Reads as a gain, is a loss
In baht	-4.67 percent	-9.94 percent	Loss on both readings
In DTAs	0.00 percent	Count unchanged	Neither reading applies

Table 4.2. Gold. Each currency position measured against the price level of its own economy across this window. Purchasing power figures are index ratios, not exchange rate movements.

What the holder got.

The gold window separates the closing chart reading from the position reading more sharply than any of the other nine. The chart shows a spread of 9.39 points at the close. The positions show a spread of 32.58 points between the best and worst placed holder. The chart is measuring one thing and the table another.

4.6 Stack 2. Crude oil. Created 2021-09-02.

What was recognized.

The unit is the barrel at stated API gravity and sulphur content. The stack holds 51,070,265 barrels, against a pool of 3.7289 billion United States dollars equivalent, entered through the Russian ruble. The quantity is the pool at 73.01 dollars per barrel, IMF series POILAPSP for September 2021.

Fifty-one million barrels is a field position rather than a national reserve. The stack enters on the ruble 11 weeks before that currency begins the largest move in the set.

The stack was created on 2021-09-02 at 1200 New York time. Underwriting at the highest surety class was embedded inside the creation event, before any instrument existed. The stack segments into 3,728,856,691 instruments, each carrying the identical quantity of universal value units.

The window.

Over the 1,778 days from this creation to July 16 2026, the net movements of the five currencies on the neutral basis were: USD +3.58 percent, EUR +0.27 percent, RUB -2.75 percent, CNY -1.15 percent, THB +0.16 percent. The widest spread between any two at the close was 6.33 percentage points. Inside the window the spread reached 43.35 points, at 2022-07-19.

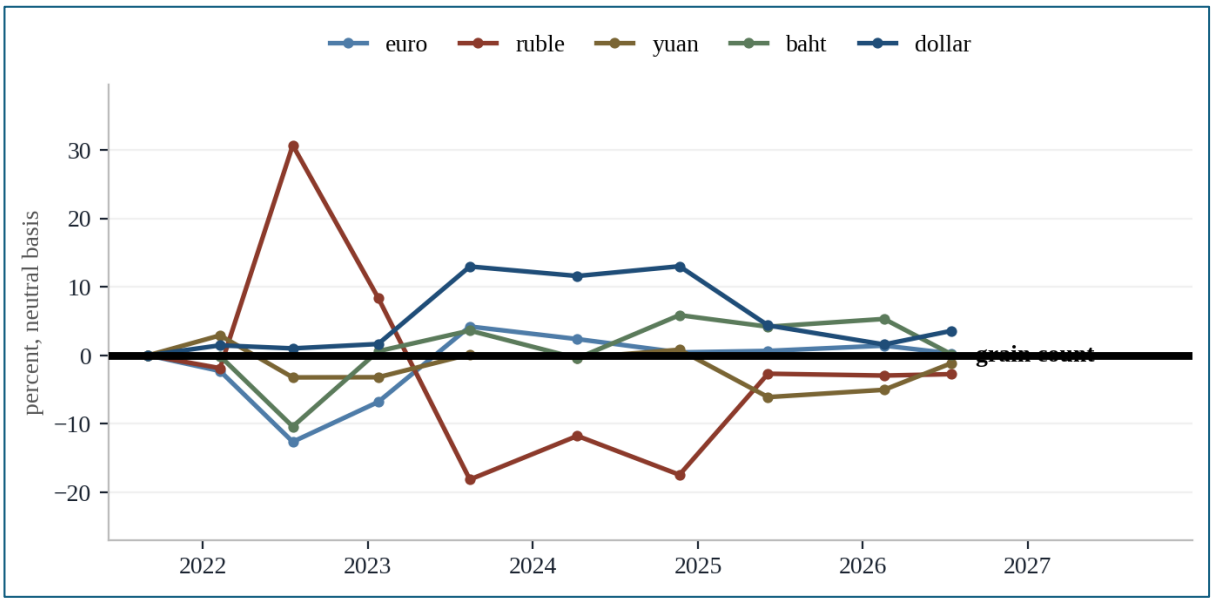

Figure 4.3. Crude oil. The five currencies on the neutral basis at every lock instant from creation to the reference instant. The black line is the recognized value held..

What this chart indicates.

The stack was created on the ruble and the ruble is the line that moves furthest. It reaches plus 30 percent within 11 months and ends below where it started. The holder who entered on that currency saw his expression rise by a third and then give all of it back.

The stack stood at 3,728,856,691 instruments at creation and stood at the identical figure at the reference instant. Every DTA in this stack exchanged at one for one against every DTA of every other uniquely issued stack at every joint instant.

The positions.

The chart above shows how the five currencies moved apart. It does not show what happened to all of them together. This table does.

Position held	Chart reading	Purchasing power at the close	What that means
In dollar	+3.58 percent	-17.85 percent	Reads as a gain, is a loss
In euro	+0.27 percent	-18.39 percent	Reads as a gain, is a loss
In ruble	-2.75 percent	-33.28 percent	Loss on both readings
In yuan	-1.15 percent	-3.20 percent	Loss on both readings
In baht	+0.16 percent	-8.02 percent	Reads as a gain, is a loss
In DTA	0.00 percent	Count unchanged	Neither reading applies

Table 4.3. Crude oil. Each currency position measured against the price level of its own economy across this window. Purchasing power figures are index ratios, not exchange rate movements.

What the holder got.

The ruble position is the worst of the five at minus 33.28 percent, and it is worst for a reason that has nothing to do with the currency chart. Russian prices rose 54.56 percent between March 2021 and July 2026, roughly twice the American rate.

4.7 Stack 3. Copper. Created 2022-02-08.

What was recognized.

The unit is the metric ton of contained copper. The stack holds 250,011 metric tons, against a pool of 2.4859 billion United States dollars equivalent, entered through the Chinese yuan. The quantity is the pool at 9,943.18 dollars per metric ton, IMF series PCOPPUSDM for February 2022.

A quarter of a million contained tons is roughly a quarter of a large mine's annual output. The stack is created two weeks before the invasion of Ukraine. The stack was created on 2022-02-08 at 1200 New York time. Underwriting at the highest surety class was embedded inside the creation event, before any instrument existed. The stack segments into 2,485,904,461 instruments, each carrying the identical quantity of universal value units.

The window.

Over the 1,619 days from this creation to July 16 2026, the net movements of the five currencies on the neutral basis were: USD +2.09 percent, EUR +2.62 percent, RUB -0.89 percent, CNY -3.94 percent, THB +0.26 percent. The widest spread between any two at the close was 6.56 percentage points. Inside the window the spread reached 43.80 points, at 2022-07-19.

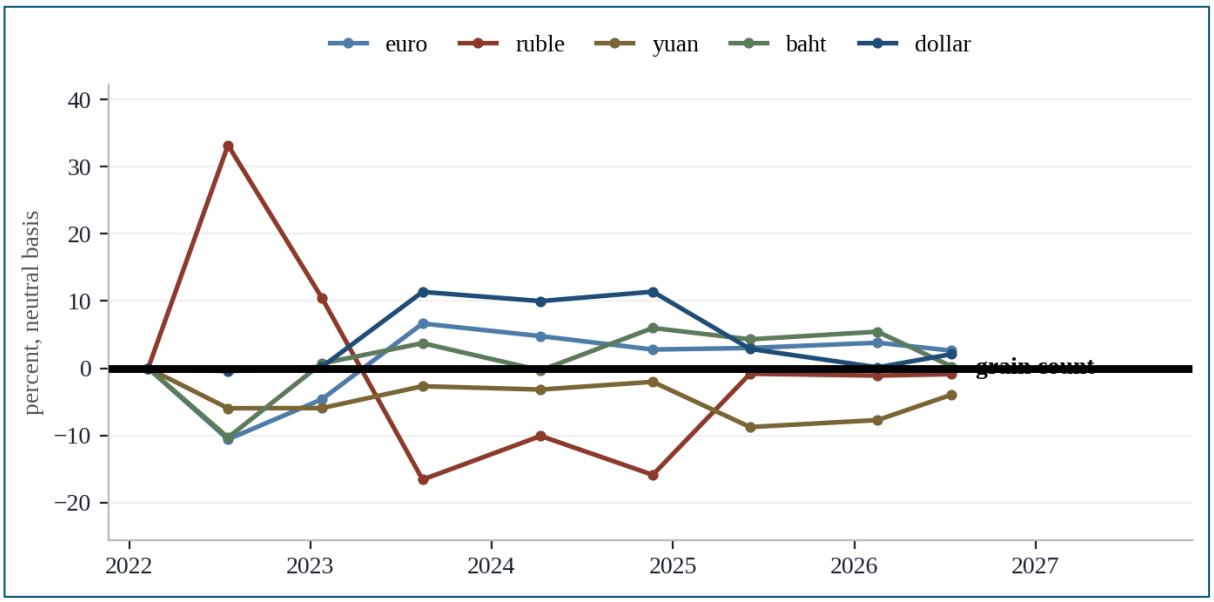

Figure 4.4. Copper. The five currencies on the neutral basis at every lock instant from creation to the reference instant. The black line is the recognized value held.

What this chart indicates.

The creation instant sits two weeks before the largest currency event in the run. The ruble line leaves the others immediately and reaches plus 33 percent inside six months. Nothing about the copper changed in that period.

The count stood at 2,485,904,461 instruments at creation and stood at the identical figure at the reference instant. Every DTA in this stack exchanged at one for one against every DTA of every other uniquely issued stack at every joint instant.

The positions.

The chart above shows how the five currencies moved apart. It does not show what happened to all of them together. This table does.

Position held	Chart reading	Purchasing power at the close	What that means
In dollar	+2.09 percent	-15.03 percent	Reads as a gain, is a loss
In euro	+2.62 percent	-15.94 percent	Reads as a gain, is a loss
In ruble	-0.89 percent	-29.83 percent	Loss on both readings
In yuan	-3.94 percent	-1.45 percent	Loss on both readings
In baht	+0.26 percent	-5.41 percent	Reads as a gain, is a loss
In DTAs	0.00 percent	Count unchanged	Neither reading applies

Table 4.4. Copper. Each currency position measured against the price level of its own economy across this window. Purchasing power figures are index ratios, not exchange rate movements.

What the holder got.

The yuan position is the mildest of the fifty at minus 1.45 percent, because the Chinese price level rose least of the five economies across these years. The mildness is a fact about the Chinese price level rather than about the yuan, and the copper window separates currency dispersion from price level more plainly than any other window in the run.

4.8 Stack 4. Natural gas. Created 2022-07-19.

What was recognized.

The unit is the million British thermal units. The stack holds 60,755,208 million British thermal units, against a pool of 3.1074 billion United States dollars equivalent, entered through the euro. The quantity is the pool at 51.15 dollars per million BTU, IMF series PNGASEU for July 2022.

The stack is created at the height of the European gas dislocation and carries the widest currency spread in the run.

The stack was created on 2022-07-19 at 1200 New York time. Underwriting at the highest surety class was embedded inside the creation event, before any instrument existed. The stack segments into 3,107,380,576 instruments, each carrying the identical quantity of universal value units.

The window.

Over the 1,458 days from this creation to July 16 2026, the net movements of the five currencies on the neutral basis were: USD +2.54 percent, EUR +14.77 percent, RUB -25.60 percent, CNY +2.15 percent, THB +11.80 percent. The widest spread between any two at the close was 40.37 percentage points. Inside the window the spread reached 56.67 points, at 2023-08-15.

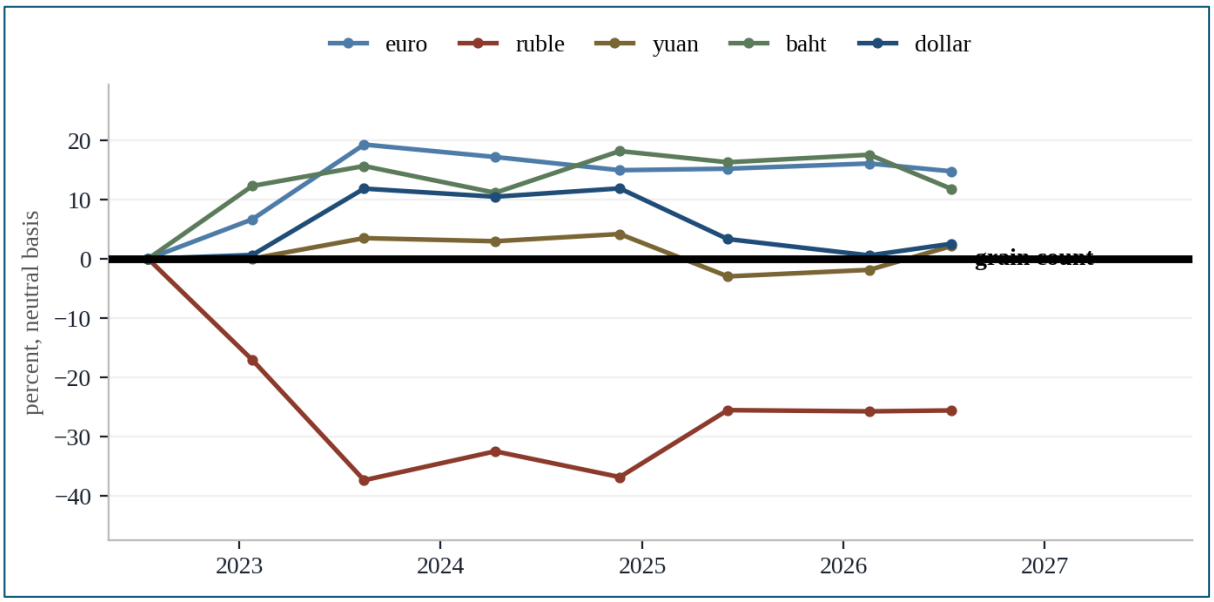

Figure 4.5. Natural gas. The five currencies on the neutral basis at every lock instant from creation to the reference instant. The black line is the recognized value held.

What this chart indicates.

This is the widest band in the document. The spread reaches 56.67 points inside the window and closes at 40.37. The euro and the ruble end 40 points apart having started together.

The count stood at 3,107,380,576 instruments at creation and stood at the identical figure at the reference instant. Every DTA in this stack exchanged at one for one against every DTA of every other uniquely issued stack at every joint instant.

The positions.

The chart above shows how the five currencies moved apart. It does not show what happened to all of them together. This table does.

Position held	Chart reading	Purchasing power at the close	What that means
In dollar	+2.54 percent	-11.27 percent	Reads as a gain, is a loss
In euro	+14.77 percent	-11.86 percent	Reads as a gain, is a loss
In ruble	-25.60 percent	-23.80 percent	Loss on both readings
In yuan	+2.15 percent	-0.69 percent	Reads as a gain, is a loss
In baht	+11.80 percent	-2.39 percent	Reads as a gain, is a loss
In DTAs	0.00 percent	Count unchanged	Neither reading applies

Table 4.5. Natural gas. Each currency position measured against the price level of its own economy across this window. Purchasing power figures are index ratios, not exchange rate movements.

What the holder got.

The natural gas stack separates currency dispersion from positional loss more plainly than any other stack in the run. The natural gas window carries the widest dispersion of the ten at 56.67 points and positional losses smaller than gold or crude oil, because 1,458 days is a shorter window than either. Dispersion and price level are different things, and this stack shows them moving independently.

4.9 Stack 5. Silver. Created 2023-01-24.

What was recognized.

The unit is the troy ounce of fine silver. The stack holds 8,719,885 troy ounces, which is 271.22 metric tons, against a pool of 207.16 million United States dollars equivalent, entered through the Thai baht. The quantity is the pool at 23.76 dollars per troy ounce, IMF series PSILVER for January 2023.

The smallest stack in the run, at one twentieth of the largest, included at that size to show the recognized value behaving identically at both ends of the range.

The stack was created on 2023-01-24 at 1200 New York time. Underwriting at the highest surety class was embedded inside the creation event, before any instrument existed. The stack segments into 207,158,705 instruments, each carrying the identical quantity of universal value units.

The window.

Over the 1,269 days from this creation to July 16 2026, the net movements of the five currencies on the neutral basis were: USD +1.89 percent, EUR +7.61 percent, RUB -10.30 percent, CNY +2.13 percent, THB -0.44 percent. The widest spread between any two at the close was 17.91 percentage points. Inside the window the spread reached 36.35 points, at 2023-08-15.

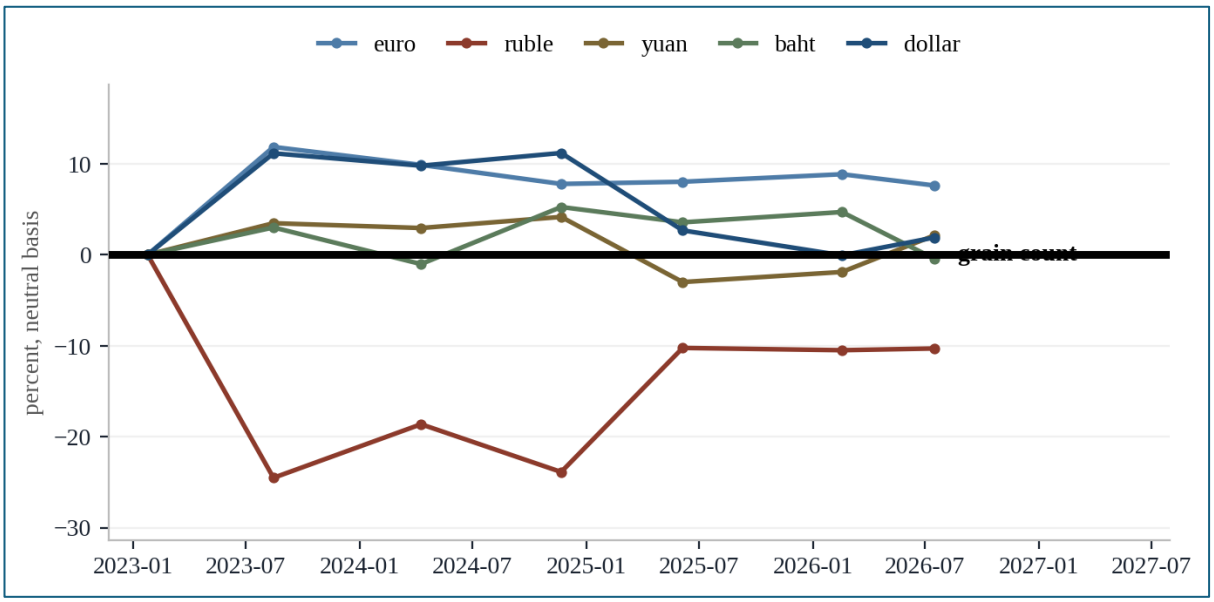

Figure 4.6. Silver. The five currencies on the neutral basis at every lock instant from creation to the reference instant. The black line is the recognized value.

What this chart indicates.

The band opens to 36.35 points inside the window and closes at 17.91. The ruble again accounts for most of the width.

The count stood at 207,158,705 instruments at creation and stood at the identical count at the reference instant. Every DTA in this stack exchanged at one for one against every DTA of every other uniquely issued stack at every joint instant.

The positions.

The chart above shows how the five currencies moved apart. It does not show what happened to all of them together. This table does.

Position held	Chart reading	Purchasing power at the close	What that means
In dollar	+1.89 percent	-10.41 percent	Reads as a gain, is a loss
In euro	+7.61 percent	-9.51 percent	Reads as a gain, is a loss
In ruble	-10.30 percent	-22.47 percent	Loss on both readings
In yuan	+2.13 percent	+0.01 percent	A rounding, not a gain
In baht	-0.44 percent	-1.69 percent	Loss on both readings
In DTAs	0.00 percent	Count unchanged	Neither reading applies

Table 4.6. Silver. Each currency position measured against the price level of its own economy across this window. Purchasing power figures are index ratios, not exchange rate movements.

What the holder got.

One of only two positive entries in the fifty appears here. The yuan position reads plus 0.01 percent. That is not a gain. It is the flattest price level in the set measured across a middling window, and it rounds to nothing.

4.10 Stack 6. Wheat. Created 2023-08-15.

What was recognized.

The unit is the metric ton of United States No. 1 hard red winter wheat at ordinary protein. The stack holds 2,059,454 metric tons, against a pool of 497.18 million United States dollars equivalent, entered through the euro. The quantity is the pool at 241.41 dollars per metric ton, IMF series PWHEAMT for August 2023.

Two million metric tons is one origin's exportable surplus rather than a share of the world crop.

The stack was created on 2023-08-15 at 1200 New York time. Underwriting at the highest surety class was embedded inside the creation event, before any instrument existed. The stack segments into 497,180,892 instruments, each carrying the identical quantity of universal value units.

The window.

Over the 1,066 days from this creation to July 16 2026, the net movements of the five currencies on the neutral basis were: USD -8.32 percent, EUR -3.78 percent, RUB +18.82 percent, CNY -1.29 percent, THB -3.34 percent. The widest spread between any two at the close was 27.15 percentage points. Inside the window the spread reached 28.66 points, at 2026-02-17.

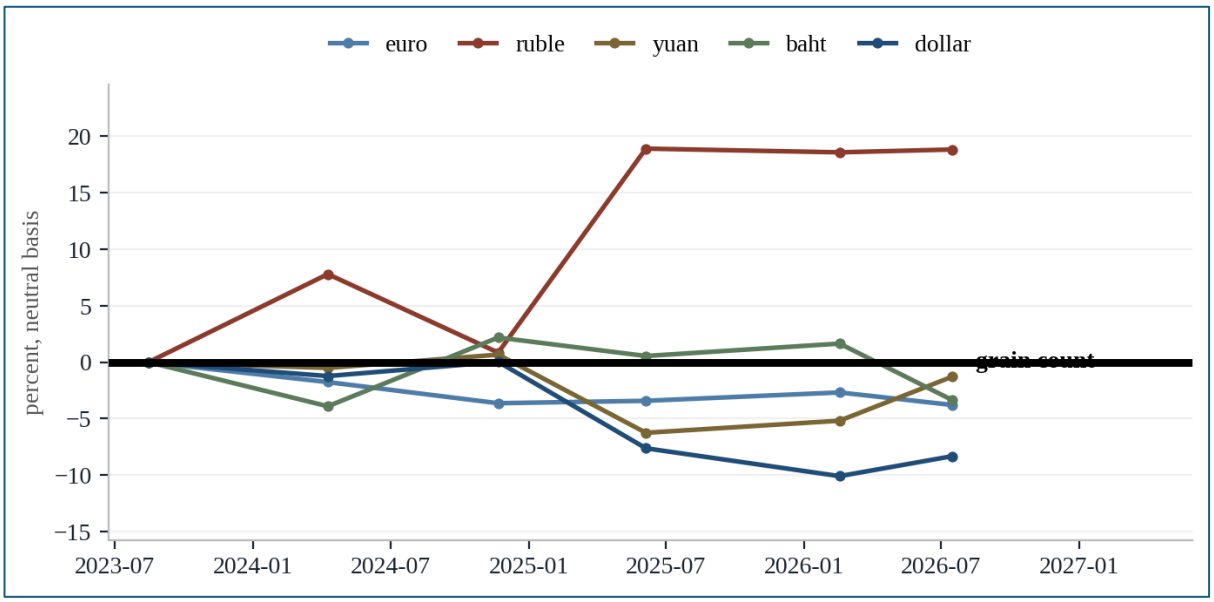

Figure 4.7. Wheat. The five currencies on the neutral basis at every lock instant from creation to the reference instant. The black line is the recognized value held.

What this chart indicates.

The direction reverses here. The ruble is the line that falls and the dollar and euro are the lines that rise, which is the opposite of the first four stacks. The stack was created after the ruble had already made its move.

The count stood at 497,180,892 instruments at creation and stood at the identical figure at the reference instant. Every DTA in this stack exchanged at one for one against every DTA of every other uniquely issued stack at every joint instant.

The positions.

The chart above shows how the five currencies moved apart. It does not show what happened to all of them together. This table does.

Position held	Chart reading	Purchasing power at the close	What that means
In dollar	-8.32 percent	-8.05 percent	Loss on both readings
In euro	-3.78 percent	-6.68 percent	Loss on both readings
In ruble	+18.82 percent	-20.29 percent	Reads as a gain, is a loss
In yuan	-1.29 percent	-0.69 percent	Loss on both readings
In baht	-3.34 percent	-1.49 percent	Loss on both readings
In DTAs	0.00 percent	Count unchanged	Neither reading applies

Table 4.7. Wheat. Each currency position measured against the price level of its own economy across this window. Purchasing power figures are index ratios, not exchange rate movements.

What the holder got.

The ruble position is the worst of the five in the wheat window at minus 20.29 percent, and the ruble is the currency that rose on the chart. The wheat window shows more plainly than any other in the run that the chart and the table answer different questions.

4.11 Stack 7. Platinum. Created 2024-04-09.

What was recognized.

The unit is the troy ounce of fine platinum. The stack holds 1,057,525 troy ounces, which is 32.89 metric tons, against a pool of 994.36 million United States dollars, entered through USD. The quantity is the pool at 940.27 dollars per troy ounce, IMF series PPLAT for April 2024.

Thirty-three metric tons is roughly a fifth of annual world mine supply, which is the scale of a refined holding rather than a reserve.

The stack was created on 2024-04-09 at 1200 New York time. Underwriting at the highest surety class was embedded inside the creation event, before any instrument existed. The stack segments into 994,361,784 instruments, each carrying the identical quantity of universal value units.

The window.

Over the 828 days from this creation to July 16 2026, the net movements of the five currencies on the neutral basis were: USD -7.18 percent, EUR -2.06 percent, RUB +10.23 percent, CNY -0.79 percent, THB +0.59 percent. The widest spread between any two at the close was 17.41 percentage points. Inside the window the spread reached 18.96 points, at 2026-02-17.

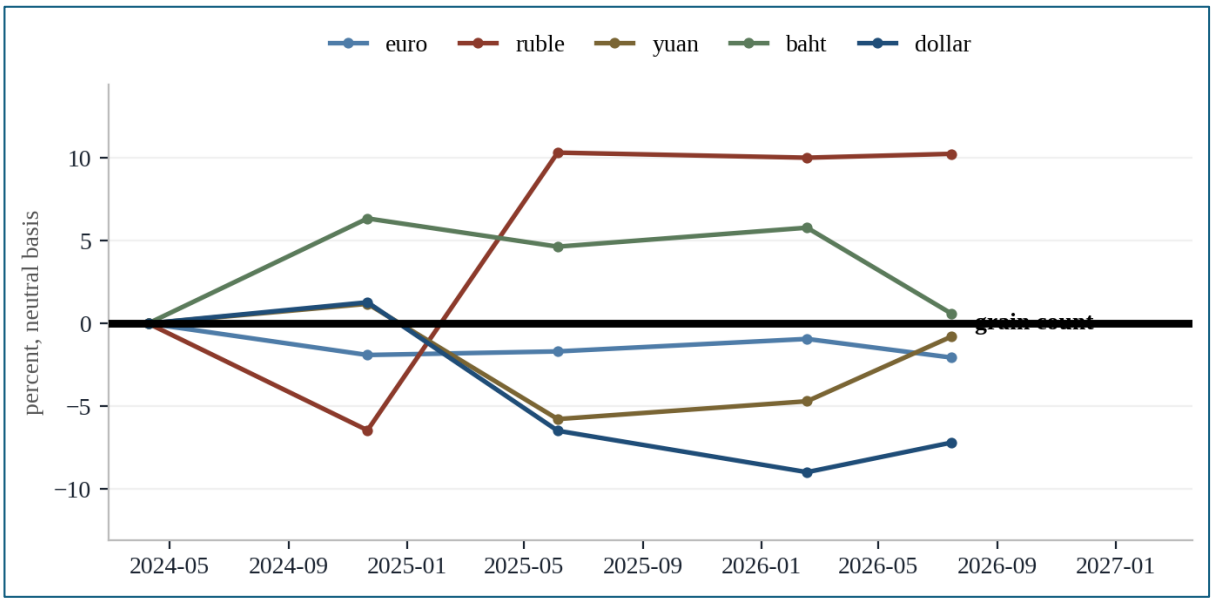

Figure 4.8. Platinum. The five currencies on the neutral basis at every lock instant from creation to the reference instant. The black line is the recognized value held.

What this chart indicates.

A quieter window. The band opens to 18.96 points and closes at 17.41, so most of the movement had already happened by the reference instant rather than reversing.

The count stood at 994,361,784 instruments at creation and stood at the identical figure at the reference instant. Every DTA in this stack exchanged at one for one against every DTA of every other uniquely issued stack at every joint instant.

The positions.

The chart above shows how the five currencies moved apart. It does not show what happened to all of them together. This table does.

Position held	Chart reading	Purchasing power at the close	What that means
In dollar	-7.18 percent	-6.10 percent	Loss on both readings
In euro	-2.06 percent	-5.17 percent	Loss on both readings
In ruble	+10.23 percent	-15.38 percent	Reads as a gain, is a loss
In yuan	-0.79 percent	-0.67 percent	Loss on both readings
In baht	+0.59 percent	-1.70 percent	Reads as a gain, is a loss
In DTAs	0.00 percent	Count unchanged	Neither reading applies

Table 4.8. Platinum. Each currency position measured against the price level of its own economy across this window. Purchasing power figures are index ratios, not exchange rate movements.

What the holder got.

Losses are moderate across all five positions because the window is 828 days rather than 1,953. The pattern holds and the magnitude scales with duration.

4.12 Stack 8. Coffee. Created 2024-11-21.

What was recognized.

The unit is the 60-kilogram bag of Other Mild Arabicas. The stack holds 1,848,790 bags, which is 110,927 metric tons, against a pool of 745.77 million United States dollars equivalent, entered through the Thai baht. The quantity is the pool at 304.95 United States cents per pound, IMF series PCOFFOTM for November 2024.

The stack is created inside the sharpest arabica appreciation in four decades.

The stack was created on 2024-11-21 at 1200 New York time. Underwriting at the highest surety class was embedded inside the creation event, before any instrument existed. The stack segments into 745,771,338 instruments, each carrying the identical quantity of universal value units.

The window.

Over the 602 days from this creation to July 16 2026, the net movements of the five currencies on the neutral basis were: USD -8.35 percent, EUR -0.16 percent, RUB +17.82 percent, CNY -1.95 percent, THB -5.40 percent. The widest spread between any two at the close was 26.17 percentage points. Inside the window the spread reached 27.69 points, at 2026-02-17.

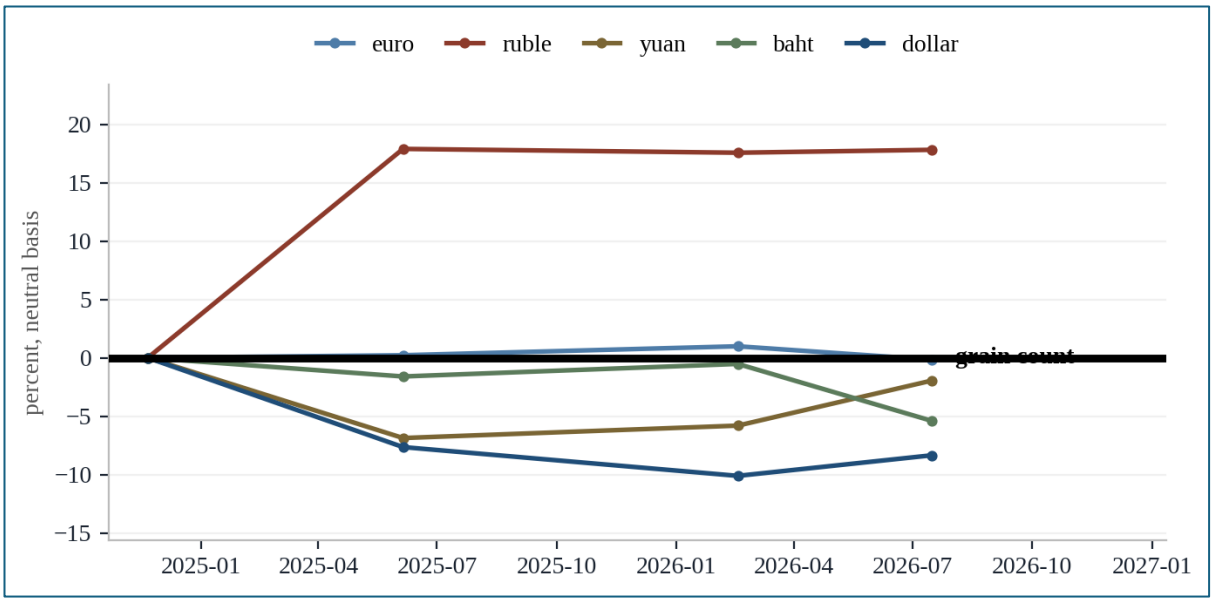

Figure 4.9. Coffee. The five currencies on the neutral basis at every lock instant from creation to the reference instant. The black line is the recognized value held.

What this chart indicates.

The band closes at 26.17 points, wider than platinum on a shorter window, driven almost entirely by the ruble.

The count stood at 745,771,338 instruments at creation and stood at the identical figure at the reference instant. Every DTA in this stack exchanged at one for one against every DTA of every other uniquely issued stack at every joint instant.

The positions.

The chart above shows how the five currencies moved apart. It does not show what happened to all of them together. This table does.

Position held	Chart reading	Purchasing power at the close	What that means
In dollar	-8.35 percent	-5.52 percent	Loss on both readings
In euro	-0.16 percent	-4.73 percent	Loss on both readings
In ruble	+17.82 percent	-10.74 percent	Reads as a gain, is a loss
In yuan	-1.95 percent	-0.87 percent	Loss on both readings
In baht	-5.40 percent	-1.43 percent	Loss on both readings
In DTAs	0.00 percent	Count unchanged	Neither reading applies

Table 4.9. Coffee. Each currency position measured against the price level of its own economy across this window. Purchasing power figures are index ratios, not exchange rate movements.

What the holder got.

Every position loses and none loses much, because the window is 602 days. The ruble is the exception at minus 10.74 percent, and the reason is Russian price level rather than anything the currency did.

4.13 Stack 9. Aluminum. Created 2025-06-05.

What was recognized.

The unit is the metric ton of London Metal Exchange standard grade aluminum at minimum purity 99.5 percent. The stack holds 590,486 metric tons, against a pool of 1.4915 billion United States dollars equivalent, entered through the Chinese yuan. The quantity is the pool at 2,525.96 dollars per metric ton, IMF series PALUMUSDM for June 2025.

Half a million metric tons is a warehouse position, which is the form in which this class ordinarily presents.

The stack was created on 2025-06-05 at 1200 New York time. Underwriting at the highest surety class was embedded inside the creation event, before any instrument existed. The stack segments into 1,491,542,676 instruments, each carrying the identical quantity of universal value units.

The window.

Over the 406 days from this creation to July 16 2026, the net movements of the five currencies on the neutral basis were: USD -0.76 percent, EUR -0.38 percent, RUB -0.07 percent, CNY +5.29 percent, THB -3.87 percent. The widest spread between any two at the close was 9.15 percentage points. Inside the window the spread reached 9.15 points, at 2026-07-16.

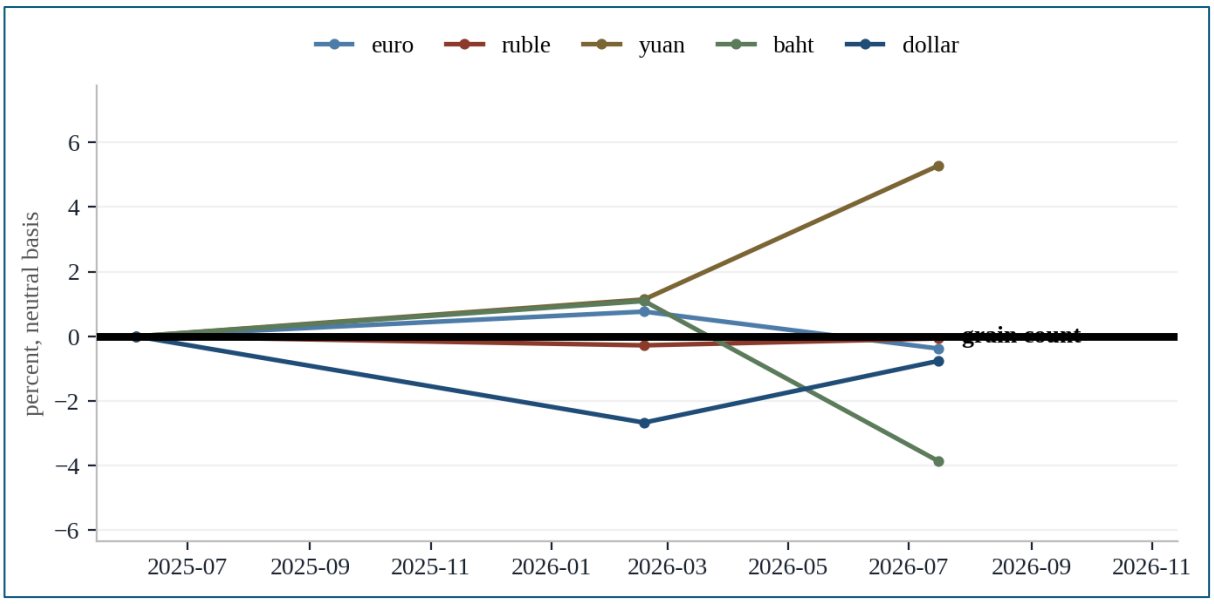

Figure 4.10. Aluminum. The five currencies on the neutral basis at every lock instant from creation to the reference instant. The black line is the recognized value held.

What this chart indicates.

The band closes at 9.15 points and never opens wider, so the finish and the widest reading are the same number.

The count stood at 1,491,542,676 instruments at creation and stood at the identical figure at the reference instant. Every DTA in this stack exchanged at one for one against every DTA of every other uniquely issued stack at every joint instant.

The positions.

The chart above shows how the five currencies moved apart. It does not show what happened to all of them together. This table does.

Position held	Chart reading	Purchasing power at the close	What that means
In dollar	-0.76 percent	-3.40 percent	Loss on both readings
In euro	-0.38 percent	-2.88 percent	Loss on both readings
In ruble	-0.07 percent	-6.17 percent	Loss on both readings
In yuan	+5.29 percent	-0.89 percent	Reads as a gain, is a loss
In baht	-3.87 percent	-1.65 percent	Loss on both readings
In DTAs	0.00 percent	Count unchanged	Neither reading applies

Table 4.10. Aluminum. Each currency position measured against the price level of its own economy across this window. Purchasing power figures are index ratios, not exchange rate movements.

What the holder got.

The positions are small across the board because the window is 406 days. This stack demonstrates the pattern at low magnitude rather than at high, and it is stated plainly rather than written up as something it is not.

4.14 Stack 10. Iron ore. Created 2026-02-17.

What was recognized.

The unit is the metric ton of iron ore at 63.5 percent iron content, CIF China. The stack holds 19,697,158 metric tons, against a pool of 1.9887 billion United States dollars equivalent, entered through the Russian ruble. The quantity is the pool at 100.97 dollars per metric ton, IMF series PIORECRUSDM for February 2026.

Twenty million metric tons is a deposit position and the most recent creation in the run, one hundred and 40-nine days from the reference instant.

The stack was created on 2026-02-17 at 1200 New York time. Underwriting at the highest surety class was embedded inside the creation event, before any instrument existed. The stack segments into 1,988,723,569 instruments, each carrying the identical quantity of universal value units.

The window.

Over the 149 days from this creation to July 16 2026, the net movements of the five currencies on the neutral basis were: USD +1.96 percent, EUR -1.14 percent, RUB +0.21 percent, CNY +4.10 percent, THB -4.90 percent. The widest spread between any two at the close was 9.00 percentage points. Inside the window the spread reached 9.00 points, at 2026-07-16.

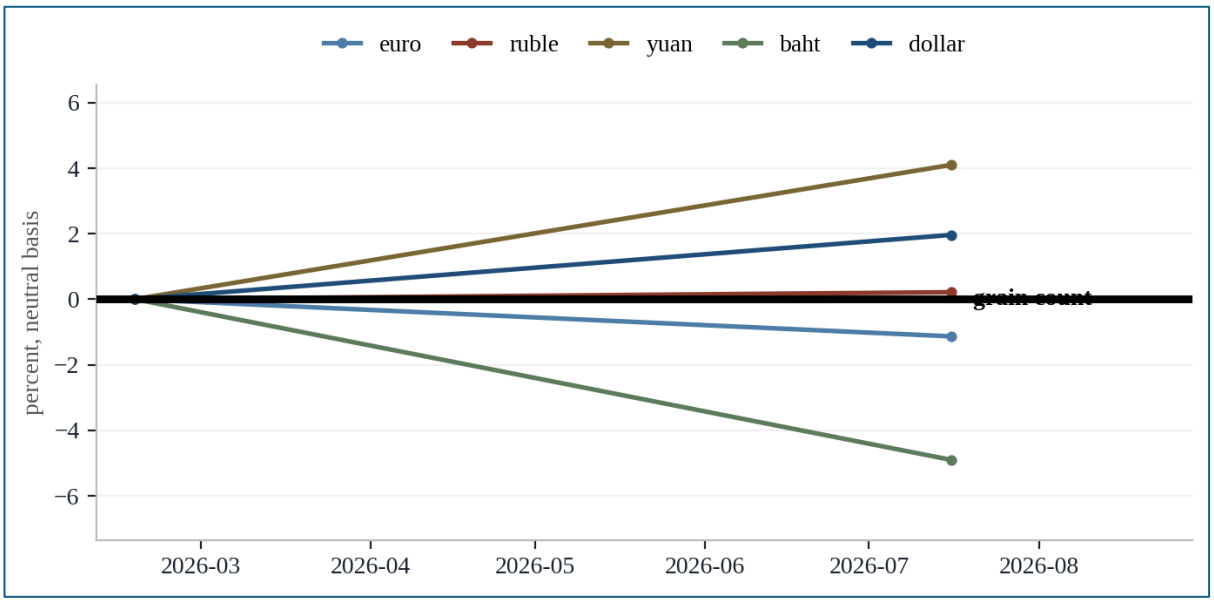

Figure 4.11. Iron ore. The five currencies on the neutral basis at every lock instant from creation to the reference instant. The black line is the recognized value held.

What this chart indicates.

The shortest window in the run at 149 days. The band closes at 9.00 points and, as with aluminum, never opens wider than it finishes.

The count stood at 1,988,723,569 instruments at creation and stood at the identical figure at the reference instant. Every DTA in this stack exchanged at one for one against every DTA of every other uniquely issued stack at every joint instant.

The positions.

The chart above shows how the five currencies moved apart. It does not show what happened to all of them together. This table does.

Position held	Chart reading	Purchasing power at the close	What that means
In dollar	+1.96 percent	-2.14 percent	Reads as a gain, is a loss
In euro	-1.14 percent	-2.44 percent	Loss on both readings
In ruble	+0.21 percent	-2.22 percent	Reads as a gain, is a loss
In yuan	+4.10 percent	+0.83 percent	A rounding, not a gain
In baht	-4.90 percent	-2.38 percent	Loss on both readings
In DTAs	0.00 percent	Count unchanged	Neither reading applies

Table 4.11. Iron ore. Each currency position measured against the price level of its own economy across this window. Purchasing power figures are index ratios, not exchange rate movements.

What the holder got.

The second of the two positive entries in the fifty appears here, the yuan at plus 0.83 percent. The yuan entry is not a gain. The yuan entry is 149 days measured against the flattest price level of the five economies. Every other position in this window is a loss, and every one of those losses is small, which is what 149 days produces.

Evaluating the Results.

4.15 The method and the symbols.

Four questions are asked and answered. Each is answered three times in sequence. First in symbols, then in plain logic, then in full explanation. The symbols are few and they are fixed here once. No symbol below carries more than one meaning anywhere in this document.

d is one DTA.

g(d) is the count of the granular value held by d, in grains.

c is a currency.

q is an instrument class.

σ(x) is the movement of x across time.

L(c, t) is the price level of currency c's own economy at instant t.

S is the size of a trade or position.

t0 is the instant a position is taken.

t1 is the instant it is closed.

X is the exposure to value movement across that window.

Ω is the set of five properties held jointly, whose members are **ω1** through **ω5.**

P1, P2 and so on are premise labels within a single argument and carry no value.

4.16 Question one. What is the benefit in global trade?

The symbols.

P1. $X = S \times \sigma(c) \times (t1 - t0)$. Exposure equals size times currency movement times time held.

P2. $\sigma(g(d)) = 0$ at every instant. Demonstrated in *Sections 4.5 through 4.14.*

P3. A position in currency c also carries $\sigma(L(c))$ across the same window.

P4. A position in grains carries neither term.

$\therefore$ $X = 0$ across the entire window on both counts.

The plain logic.

A currency position loses on two fronts across a holding window. It moves against other currencies, which the charts show. And it loses purchasing power in its own economy, which the charts cannot show and the tables do.

A DTA position carries neither. The recognized value does not move against other currencies and it is not denominated in any economy whose price level could rise.

The explanation.

Global trade pays for the first term every day and the price is measurable. *The Bank for International Settlements* recorded average daily foreign exchange turnover of 9.6 trillion dollars in 2025. Spot exchange was 3.0 trillion of that. The remaining 69 percent was swaps, forwards, options and currency swaps, and the Bank's own descriptions of those instruments share one purpose. They hedge currency risk and manage funding across time.

Roughly two thirds of the largest market on earth is the running cost of the first term alone. There is no equivalent market for the second, because a price level cannot be hedged away by anyone holding the currency to which it belongs.

The fifty positions.

Every currency position in this document, across every window, measured against the price level of its own economy.

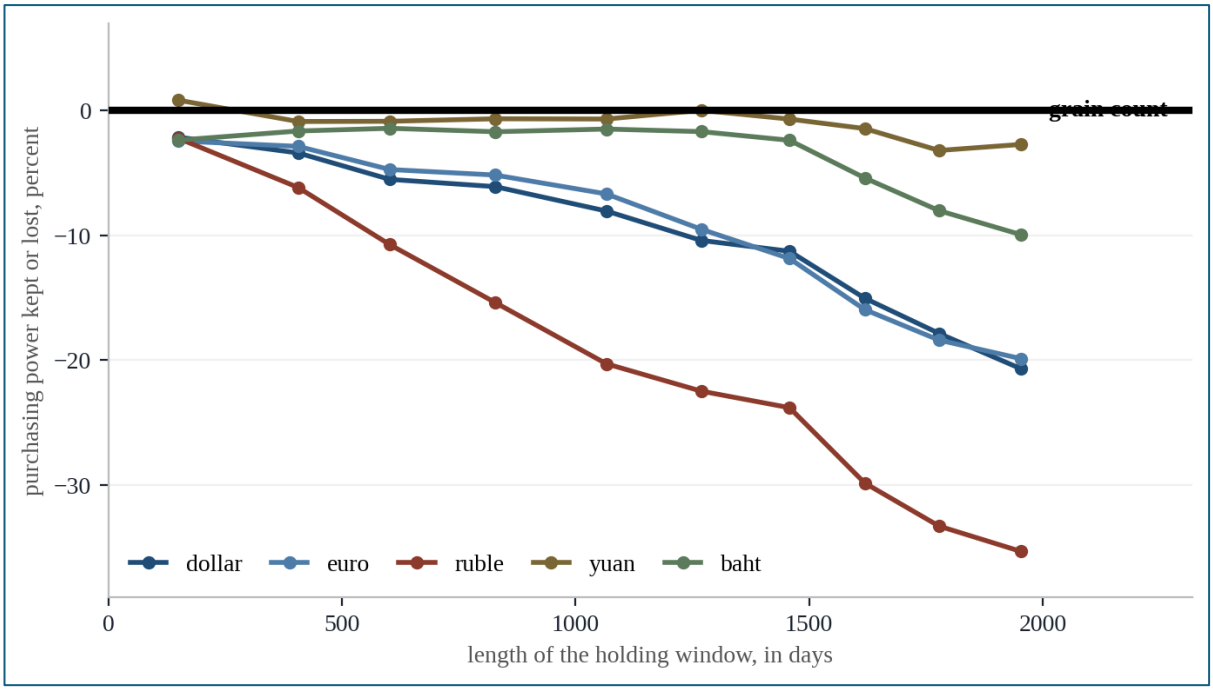

Figure 4.12. The fifty positions. Purchasing power kept or lost, plotted against the length of the holding window. The black line is the recognized value held.

48 of the fifty are losses. The two exceptions are the yuan at plus 0.01 percent over the silver window and plus 0.83 over iron ore, both across short windows against the flattest price level in the set. Neither is a gain and both are stated as roundings in their own sections.

Window	Days	Dollar	Euro	Ruble	Yuan	Baht	DTA
Gold	1,953	**−20.68%**	**−19.87%**	**−35.30%**	−2.72%	**−9.94%**	**0.00%**
Crude oil	1,778	−17.85%	−18.39%	−33.28%	**−3.20%**	−8.02%	**0.00%**
Copper	1,619	−15.03%	−15.94%	−29.83%	−1.45%	−5.41%	**0.00%**
Natural gas	1,458	−11.27%	−11.86%	−23.80%	−0.69%	−2.39%	**0.00%**
Silver	1,269	−10.41%	−9.51%	−22.47%	+0.01%	−1.69%	**0.00%**
Wheat	1,066	−8.05%	−6.68%	−20.29%	−0.69%	−1.49%	**0.00%**
Platinum	828	−6.10%	−5.17%	−15.38%	−0.67%	−1.70%	**0.00%**
Coffee	602	−5.52%	−4.73%	−10.74%	−0.87%	−1.43%	**0.00%**
Aluminum	406	−3.40%	−2.88%	−6.17%	−0.89%	−1.65%	**0.00%**
Iron ore	149	−2.14%	−2.44%	−2.22%	+0.83%	−2.38%	**0.00%**

Table 4.12. Purchasing power kept or lost by each currency position, across each stack's own window, ordered from the longest window to the shortest. Figures are the ratio of the price level at the creation month to the price level at the reference month, expressed as a percentage change. They are index ratios for a position as held and are not returns.

How to read the table.

Each row is one stack's window. Each figure is what a holder of that currency, taking the value at that creation and still holding it at the reference instant, could buy at the end compared with the beginning.

The bold red figure in each currency column is that currency's worst position in the run. Four of the five fall in the longest window. The yuan is the exception, and its worst sits at crude oil rather than gold, because Chinese prices moved so little across these years that the ordering is decided by small differences rather than by duration.

The two shaded figures are the only positive entries in the fifty. Neither is a gain. Both are the yuan across short windows against the flattest price level in the set, and both round to nothing.

The DTA column is 0.00 percent in every row. The count held at creation is the count held at the reference instant, in all ten windows. This illustrates the holder lost no value during the testing period.

Reference information.

Price levels are monthly all-items consumer price indices from the following sources, taken at the creation month of each stack and at July 2026.

Economy	Series	Base	Source
United States	CUUR0000SA0, all items, US city average, not seasonally adjusted	1982–84 = 100	Bureau of Labor Statistics
Euro area	HICP overall index, euro area, monthly	2025 = 100	Eurostat, via the European Central Bank
Russia	Long consumer price series, all items, monthly	2010 = 100	*Bank for International Settlements*
China	Long consumer price series, all items, monthly	2010 = 100	*Bank for International Settlements*
Thailand	Headline CPI, all commodities, whole kingdom	2023 = 100	Ministry of Commerce, Trade Policy and Strategy Office

Table 4.13. The price level series behind Table 4.12. Every observation is a published index level on a stated base. No series was chained, spliced or rebased in preparing this document.

Exchange rates behind *Figure 4.12* and the ten stack charts come from two independent official sources. The European Central Bank reference series supplies the euro, yuan and baht. The Central Bank of Russia official series supplies the ruble.

The United States index rises 26.07 percent between March 2021 and July 2026. The Russian index rises 54.56 percent across the same span, which is 2.09 times the American rate.

What the figure shows.

The loss is a function of duration. Every line falls as the window lengthens and none of them recovers. The worst single position is the ruble over the gold window at minus 35.30 percent across 1,953 days. The mildest of the fifty positions is the yuan, which stays inside one and a half percent at every duration in the run.

The spread between the currencies is real and it matters, but it is secondary to the direction. All five slope downward. A holder choosing between them was choosing how fast to lose rather than whether to lose.

What the figure means for the holder.

> A holder in dollars across the gold window read plus 4.73 percent on the chart and could buy 20.68 percent less at the end of it. A holder in rubles read minus 0.53 percent and could buy 35.30 percent less. A holder in grains held the count with which he started. He never held the thing they held.

None of the currency holders did anything wrong. They held ordinary money in ordinary economies across an ordinary period. The loss was not a risk they took. It was a condition of the DTA they were holding.

The DTA holder did not outperform them. He was never in the thing they were in.

And what it does not show.

The purchasing power figures are index ratios for each economy over each window. They are not returns and they carry no assumption about what the holder did with the money. A holder who spent it, invested it or converted it faced a different outcome, and this document makes no claim about any of those.

What is measured here is the position as held. That is the comparison the run was built to make.

Data sources for this section. Exchange rates: European Central Bank reference series for EUR, CNY and THB; Central Bank of Russia official series for RUB. Price levels: Bureau of Labor Statistics CUURoooOSA0 for the United States; Eurostat HICP for the euro area; Bank for International Settlements long consumer price series for Russia and China; Ministry of Commerce Trade Policy and Strategy Office for Thailand. Turnover: Bank for International Settlements Triennial Central Bank Survey, April 2025.

4.17 Question two. What is unique here?

The symbols.

Ω holds five properties, ω1 through ω5.

ω1. Segregation. Each DTA stack issued is isolated to one specific named asset.

ω2. Insurance. Coverage of the named assets is embedded inside the creation event at the highest surety class.

ω3. Lock. Value is set at creation and is never repriced by any market. σ(g(d)) = 0.

ω4. Parity. Every instrument of every issuance carries an identical quantity of universal value units grain and exchanges one for one with every instrument of every other issuance at every joint instant.

ω5. Transmutation. Value is transmuted to any currency at the desk at the holder's instant.

For every existing instrument class q there is at least one property in Ω that q fails. The DTA holds all five.

∴ The DTA is the only instrument for which Ω holds in full.

The plain logic.

Uniqueness here is not one feature. Any single feature can be found somewhere in finance. The uniqueness is the conjunction. There are five properties held at once, and every existing class fails at least one of them.

The explanation.

Test each incumbent class against the five. A national currency fails segregation because it is a claim on nothing specific. It fails the lock because it floats. First Generation Digital instruments are the FGD category and it holds cryptocurrencies and stablecoins. An FGD fails segregation because its reserves are pooled baskets. A stablecoin also fails the lock because it is pegged to a floating currency and floats with it.

Custodied gold can satisfy segregation when bars are allocated. It fails the lock because its trade value is repriced by markets continuously. It fails parity because bars differ and do not interchange as par instruments. The Special Drawing Right of the International Monetary Fund is a basket by definition and a basket is pooling. Pooled funds fail segregation outright and their insurance covers the pool rather than the asset.

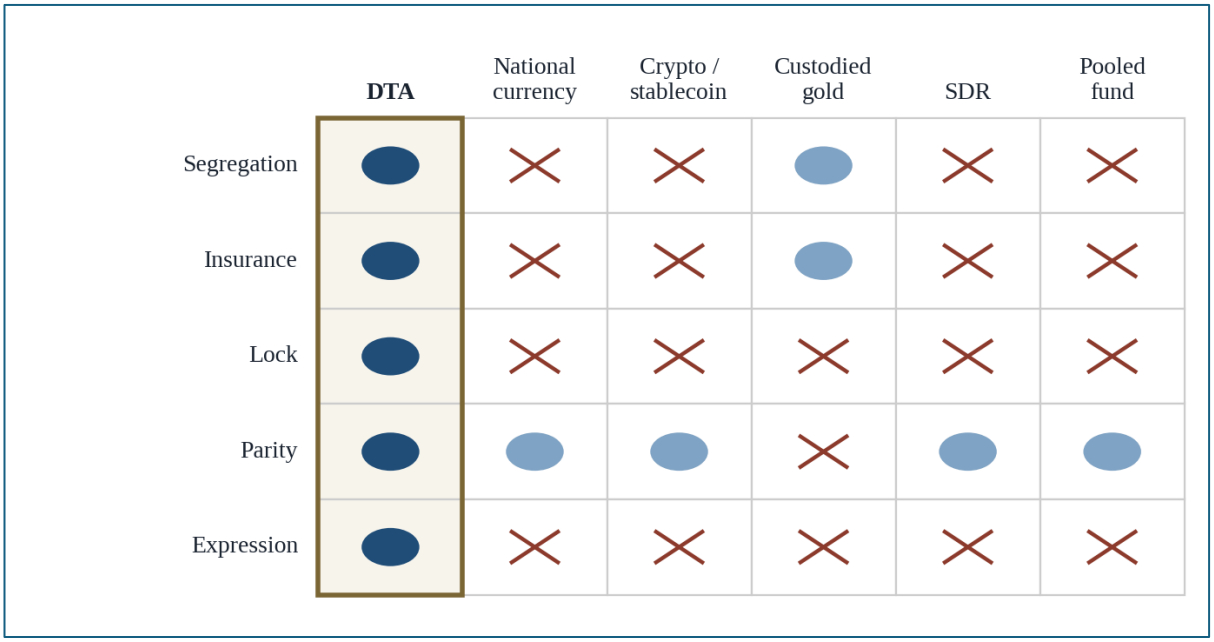

Figure 4.13. The five properties against six instrument classes. Read down the DTA column and five are filled. Read down every other column and at least one is failed.

The matrix is the answer to the question. The hardest row of the matrix is demonstrated rather than claimed. Ten stacks held the lock across windows containing a ruble that ran from 56.56 to 101.04 per dollar and a European gas market entered at its height.

4.18 Question three. Why is this revolutionary?

The symbols.

Prior paradigm. The recorded value of an asset is $v(a, t) = m(a) \times u(c, t)$.

m is the asset's magnitude and u is the unit of account. The unit floats. $\sigma(u) > 0$.

Every measurement inherits the movement of the unit.

DTA paradigm. The universal value unit is the unit. $\sigma(g(d)) = 0$. Currencies are measured against it.

∴ The measured object and the measuring instrument have exchanged places. The axiom is replaced, not optimized.

The plain logic.

Every prior system measures value with a ruler that moves.

A measurement taken with a moving ruler inherits the movement of the ruler. The fixes attempted inside that paradigm are pegs, baskets and hedges. Each one builds an approximation of a fixed ruler out of moving parts. The DTA does not approximate the fixed ruler. It is the fixed ruler.

The explanation.

Ten windows were opened at random instants across five and a half years. Inside those windows the five currencies produced closing spreads from 6.33 to 40.37 points, and spreads inside the windows reaching 56.67. The DTA movement inside every one of those windows was 0.00.

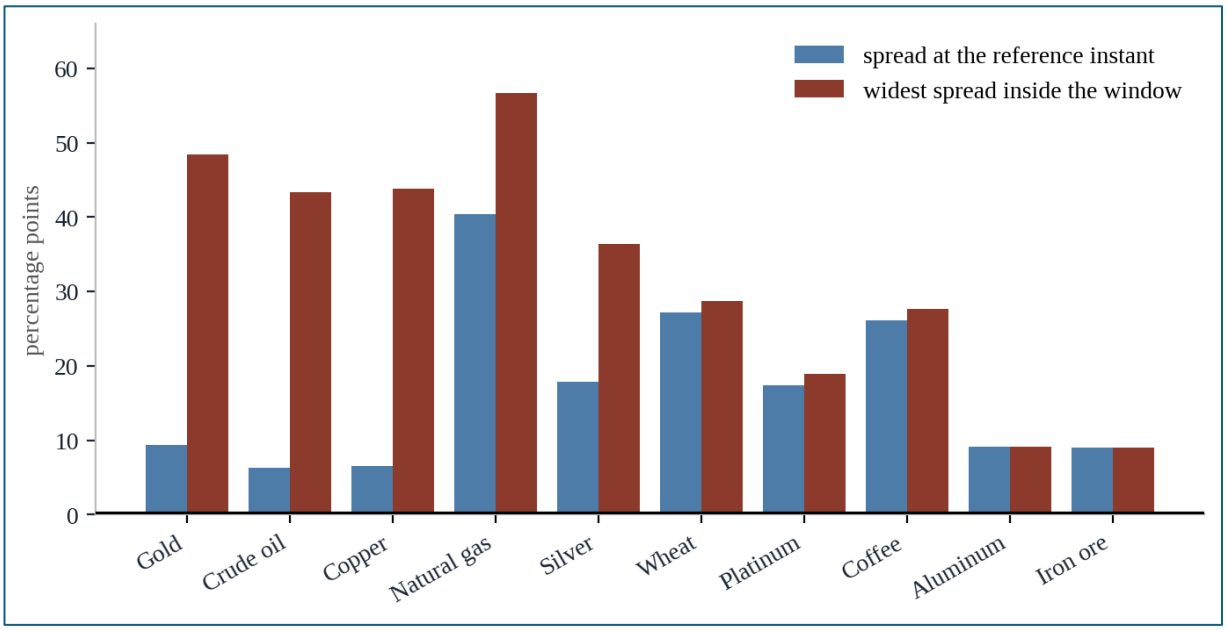

Figure 4.14. The spread between the widest and narrowest currency in each of the ten windows, read at the reference instant and at its widest point inside the window. The recognized value moved 0.00 in all ten, at both readings.

The closing reading and the widest reading inside each window differ sharply on gold, crude oil and copper. Gold closes at 9.39 points and reached 48.42 inside its own window. Crude oil closes at 6.33 and reached 43.35. Copper closes at 6.56 and reached 43.80.

A holder who transacted at the close of the gold window faced a nine-point spread. A holder who transacted in July 2022 faced 48. Both held the same asset and neither did anything different.

A second inversion sits inside the measurement inversion just stated. Pooling structures accept dilution to gain interchange. Every holder of a pooled instrument owns a fraction of a blend. The DTA gains interchange through parity while keeping full segregation. A revolution is not a better version of the old machine. It is the replacement of the assumption on which the old machine was built.

4.19 Question four. Why is this system better than using national currencies for large scale trade?

The symbols.

K(n) = Kd + Kh + Ks + Kp. The cost of using national currency n at scale.

Kd is drift against other currencies. Kh is the hedging that drift requires.

Ks is settlement exposure. Kp is the loss of purchasing power in n's own economy.

Each term grows with S and with the window t1 – t0.

Under the DTA. Kd = 0 because σ(g(d)) = 0. Kh = 0 because nothing moves that requires a hedge.

Ks is confined to the transmutation instant. Kp = 0 because the recognized value is denominated in no economy.

∴ K(DTA) < K(n) for every national currency n, and the gap grows with the length of the window.

The plain logic.

Large scale trade in a national currency pays four costs, not three. The currency drifts against others. The drift must be hedged. The settlement chain carries a risk of its own. And the currency loses purchasing power in the economy that issues it, continuously, whether or not anything else happens.

Drift, hedging and settlement are visible in's accounts. The price level is not, because the price level produces no line item and no invoice. The price level is the largest of the four costs over any window of years.

The explanation.

Take drift first. *Section 4.16* records what the five currencies did against each other across ten windows. Closing spreads ran from 6.33 to 40.37 points and spreads inside the windows reached 56.67. A treasury holding one of the five against obligations in another carried that movement in full.

Take hedging second. Drift at scale cannot be left open, so large trade hedges as a permanent operating cost. The 2025 Triennial Survey of the *Bank for International Settlements* recorded average daily foreign exchange turnover of 9.6 trillion dollars, of which spot exchange was 3.0 trillion. The remaining 69 percent was swaps, forwards, options and currency swaps, instruments the Bank describes as hedging currency risk and managing funding across time. Roughly two thirds of the largest market on earth is the running cost of carrying value through time in a currency.

Take settlement third. Only 36 percent of daily settlement runs payment versus payment, the one method that eliminates the risk that a party pays what it sold and never receives what it bought. Another 54 percent reduces the risk without removing it. The remaining 1.4 trillion dollars per day settles gross bilateral and is fully exposed.

Take the fourth, which this document measures directly.

Drift, hedging and settlement are costs of moving value between currencies. The price level is the cost of holding a currency at all, and the price level does not require a transaction to occur.

Window	Days	Dollar	Euro	Ruble
Gold	1,953	−20.68 percent	−19.87 percent	−35.30 percent
Crude oil	1,778	−17.85 percent	−18.39 percent	−33.28 percent
Natural gas	1,458	−11.27 percent	−11.86 percent	−23.80 percent
Wheat	1,066	−8.05 percent	−6.68 percent	−20.29 percent
Coffee	602	−5.52 percent	−4.73 percent	−10.74 percent
Iron ore	149	−2.14 percent	−2.44 percent	−2.22 percent

Table 4.14. Purchasing power lost by holding each currency across six of the ten windows, measured against the price level of that currency's own economy. The full set of fifty positions is at Figure 4.12.

> A treasury holding dollars across the gold window lost 20.68 percent of what those dollars buy. It paid no fee for that and it appears in no account. A treasury holding DTAs across the same window held the value with which it started. A repair program running two-to-five years holds the working balance for the whole term.

The price level is the cost that drift, hedging and settlement exist to manage and cannot touch. A hedge protects against movement between currencies. Nothing protects a currency holder against the price level of the economy that issues it, because the hedge would have to be written against the same thing being held.

What that means at the scale this document addresses.

A repair program running two to five years holds working balances the whole way through. Every unspent balance carries the fourth cost for as long as it sits, and the program pays it whether it transacts or not.

The DTA settlement geometry is different in kind. Value is continuous. It does not close when debt markets close and its functional costs do not rise when risk premiums widen. *Section 5* carries that from statement into record.

External data used in this subsection. Bank for International Settlements, Triennial Central Bank Survey, OTC foreign exchange turnover in April 2025. Bank for International Settlements Quarterly Review, Uncovering FX settlement risk, June 2026. Price levels as cited at Section 4.16.

4.20 The resolution.

Everything above resolves into one point. Under-utilized or non-utilized assets can now be segregated, segmented and exploited for global trade in a manner that is stable, reliable and durable. The DTA locks the value. The platform moves it globally through a regulated licensed network. The ledger squares at every instant while it does so.

The four questions above are not four claims. The four questions are one demonstrated record read four ways. The record is *Sections 4.5 through 4.14* and the recognized value moved 0.00 in every one of them, while every currency position in the same windows lost.

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5. The settlement verification.

The System in Settlement

The second verification. It continues from *Section 4*, carrying its ten stacks forward without restating them.

5.1 Purpose, and relation to the verification record.

The first verification, at *Sections 4.5 through 4.14,* held ten stacks across their windows and demonstrated two things. The recognized value does not move while currencies move around it. And every currency position in those same windows lost purchasing power, continuously, in proportion to how long it was held.

Nothing was transferred in the first verification. Every instrument sat in one place for the whole of the run.

This verification moves them.

Three movements are performed between holdings created in different years, in different asset classes, in different physical units, and entered on different currencies. Each is audited on both sides of the ledger at the instant it occurs.

The ten stacks are those of the first verification, at the quantities and pools stated at *Section 4.3*. They are not recreated here and no figure from that document is restated except where a movement requires it.

5.2 What moves, and what does not.

What moves in DTA settlement is a whole or fractional number of instruments. Each DTA carries the identical quantity of universal value units, the same for every DTA of every DTA stack in the system.

No currency is a term in any of the three movements. Neither side converts, neither side quotes a rate, and no third instrument stands between them.

Movement is settlement and never trade.

No venue quotes an instrument and nothing bids on one. A movement occurs because two parties have agreed an obligation and discharged it, not because a price was struck.

The obligation is extinguished rather than reassigned. After each movement below, nothing remains on any book between the two parties.

What DTA settlement requires.

Exact whole numbers on one ledger at the joint instant. If either side is not a whole number at that instant the transaction does not exist, and no partial or approximate settlement is available anywhere in the system.

And one thing that does not happen between the movements.

The holders below hold instruments between transactions. *Sections 4.5 through 4.14* measured what holding a currency costs over an interval. Held value carries none of it, so the interval between two movements costs the holder nothing.

5.3 The ten holdings, stated in instruments.

Each stack's recognized whole value is W units of the range. The stack size is W instruments, since one instrument is one unit of the range. The granular value of the stack, G, is that value expressed in grains at the fixed granular value of one instrument. Issuance is at the Mint's discipline ratio; the balance stands unreleased in the ledger.

stack size = W instruments

G, the stack's granular value = W x 10^12 grains, at 10^12 grains to one instrument

issued = 0.80 x W instruments

Stack	W, instruments	Issued	G, granular value in grains
Gold	4,143,174,102	3,314,539,281	4.143174 x 10^21
Crude oil	3,728,856,691	2,983,085,352	3.728857 x 10^21
Copper	2,485,904,461	1,988,723,568	2.485904 x 10^21
Natural gas	3,107,380,576	2,485,904,460	3.107381 x 10^21
Silver	207,158,705	165,726,964	2.071587 x 10^20
Wheat	497,180,892	397,744,713	4.971809 x 10^20
Platinum	994,361,784	795,489,427	9.943618 x 10^20
Coffee	745,771,338	596,617,070	7.457713 x 10^20

Stack	W, instruments	Issued	G, granular value in grains
Aluminum	1,491,542,676	1,193,234,140	1.491543 x 10^21
Iron ore	1,988,723,569	1,590,978,855	1.988724 x 10^21
Total	19,390,054,794	15,512,043,830	1.939005 x 10^22

Table 5.1. The ten holdings in instruments. The run carries 19,390,054,794 instruments in total, of which 15,512,043,830 are issued and the remainder stands unreleased in the ledger.

One disclosure before the movements.

The recognized whole value of each stack is taken as its pool, because no cost approach and no minting event form part of either verification. Both are steps of the creation procedure and neither is exercised here. What is demonstrated in the three movements is the behavior of recognized value in movement, which does not depend on how that value was reached.

5.4 Movement one: direct transfer between un-identical commodities.

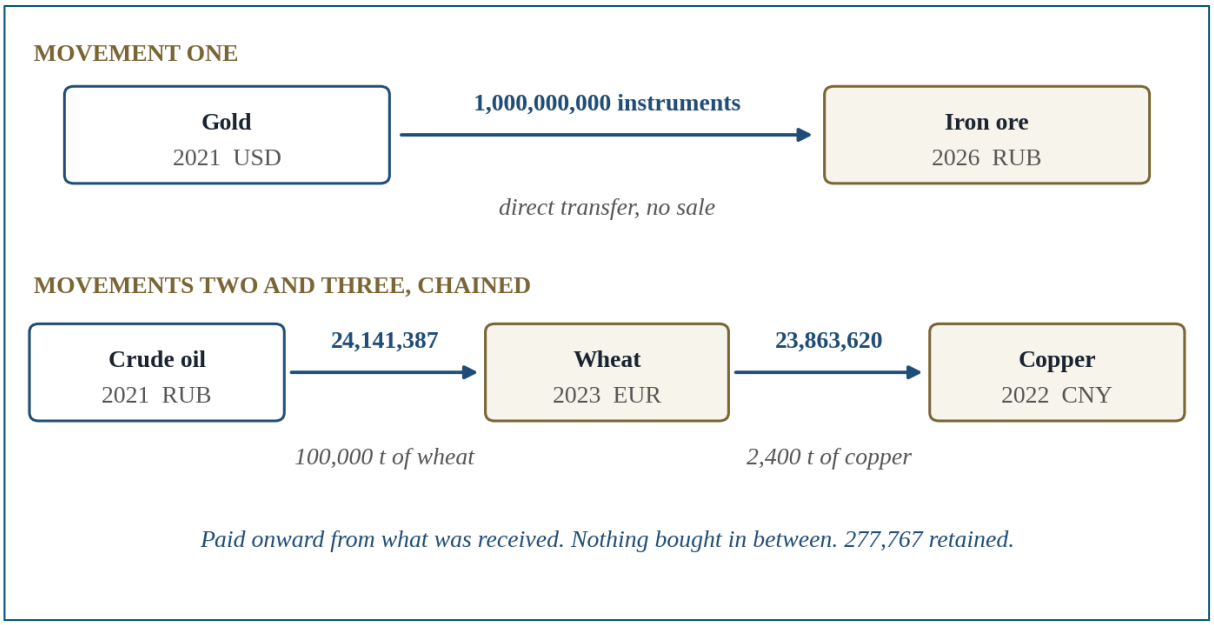

Figure 5.1. The three movements. Movement one stands alone. Movements two and three chain, with the wheat holder paying onward from what he received.

One billion instruments move out of the gold holding and into the iron ore holding.

Gold was created on 11 March 2021, entered on the United States dollar, and is counted in troy ounces of fine metal. Iron ore was created on 17 February 2026, entered on the Russian ruble, and is counted in metric tons at 63.5 percent iron content. The two creations are 1,804 days apart.

out of gold 1,000,000,000 instruments = 1.000000 x 10^21 grains

into iron ore 1,000,000,000 instruments = 1.000000 x 10^21 grains

arrival minus departure = 0

No rate was applied and no conversion occurred. The instruments leaving the gold holding and the instruments arriving at the iron ore holding carry the same count because every instrument in the system carries the same count. That is what parity is.

The gold holding stands at 2,314,539,281 instruments afterward. The iron ore holder now holds his own 1,590,978,855 and the 1,000,000,000 received, which is 2,590,978,855.

What the 1,800 days between the two creations cost, on the other side.

The gold stack was created into a dollar that lost 20.68 percent of its purchasing power by the reference instant. The iron ore stack was created into a ruble that lost 2.22 percent across its own much shorter window.

Neither the dollar loss nor the ruble loss reached the count. The instruments moving between these two holdings carry the same figure they carried at creation, five years apart, in different metals, on different currencies.

5.5 Movement two: settlement of a sale.

100,000 metric tons of wheat is sold. The holder of the crude oil stack buys it from the holder of the wheat stack.

The wheat is United States No. 1 hard red winter at ordinary protein, and its reference at the wheat stack's creation month is 241.413878 dollars per metric ton.

invoice 100,000 x 241.413878 = 24,141,387.775362

units of the range stated whole = 24,141,387

out of crude oil 24,141,387 instruments = 2.414139 x 10^19 grains

into wheat 24,141,387 instruments = 2.414139 x 10^19 grains

arrival minus departure = 0

The wheat moves under its own contract of sale. The payment is the instruments, and the seller holds them the instant the buyer releases them.

No bank stands between the two. No correspondent chain carries the value, no fee is taken along a route, and no float is held. There is no route.

What is left afterward.

Nothing. The crude oil holder has no payable and the wheat holder has no receivable. The obligation was extinguished at the instant of grain settlement rather than moved to another book to be settled later.

5.6 Movement three: the same value, carried onward.

2,400 metric tons of copper is sold. The buyer is the holder of the wheat stack, who was paid 24,141,387 instruments in movement two and has bought nothing since that payment.

The copper is London Metal Exchange grade A cathodes, and its reference at the copper stack's creation month is 9,943.175 dollars per metric ton.

invoice 2,400 x 9,943.175 = 23,863,620 units of the range

out of the wheat holder 23,863,620 instruments = 2.386362 x 10^19 grains

into the copper holder 23,863,620 instruments = 2.386362 x 10^19 grains

arrival minus departure = 0

retained by the wheat holder = 277,767 instruments

The wheat holder bought nothing between the two movements. The wheat holder received a count, held it, and paid part of it onward. He did not convert, did not hedge, and did not fund a gap, because there was no gap and nothing moved while he held it.

The currencies across the chain are three. The crude oil stack entered on the Russian ruble, the wheat stack on the euro, the copper stack on the Chinese yuan. Not one of the three is a term in either movement.

A chain of this shape settled in currency would convert at each link, pay a chain of institutions at each link, hold float at each link, and carry a hedge across the interval between them. In grain settlement the same count moves twice and the second movement costs exactly what the first cost, which is nothing.

5.7 The two-sided audit.

Each movement is recorded at the instant it occurs and audited on both sides. The audit is a comparison of two counts, not a reconciliation performed later.

Movement	Departure	Arrival	Difference	Instant
One	1,000,000,000 out of gold	1,000,000,000 into iron ore	0	joint
Two	24,141,387 out of crude oil	24,141,387 into wheat	0	joint
Three	23,863,620 out of the wheat holder	23,863,620 into copper	0	joint

Table 5.2. Arrival against departure, both sides, all three movements.

Conservation across the run.

The run carried 19,390,054,794 instruments before the movements and carries 19,390,054,794 afterward. Every movement is out of one holding and into another. No instrument was created, destroyed, split or altered by any of the three.

That is what distinguishes a count from a balance. A balance is written down and can be written differently. A count is a quantity of things that either exist or do not.

And one property visible only because two and three chain.

The instruments the wheat holder paid onward are the instruments he was paid. They carry no memory of the stack against which they were issued and no residue of the currency on which that stack entered. A count received is a count payable, and the second payment cost exactly what the first did.

5.8 What this establishes, and what it does not.

5.8.1 The findings.

Established.

Value created from different periods and different asset classes transfers directly between holdings, in exact whole counts, with no rate and no conversion.

An obligation arising from a real sale of material is discharged by moving instruments, and is extinguished rather than reassigned.

Two holdings entered on different currencies settle against each other with neither currency appearing in the movement.

Arrival equals departure on both sides of the ledger, exactly, at every instant, across all three movements.

And the interval between two movements costs the holder nothing. The wheat holder held a count between being paid and paying onward, and the count he paid was the count he received.

Not established.

Nothing in the settlement verification demonstrates recognition. No asset was valued by the cost approach and no minting event confirmed a quantity. Both are steps of the creation procedure and neither is exercised in either verification.

Nothing in the settlement verification demonstrates the cost of the currency alternative on these particular movements. What the same three transactions would have cost in conversion, rails, float, hedging and capital is the figure Section 9 shows a ministry cannot obtain: four of the five carry no published target and no indicator.

And nothing here measures what the parties would have lost by holding currency across the intervals between these movements. That loss is measured in *Sections 4.5 through 4.14* for every currency in the run, and it is not restated as a figure attached to any movement above, because no interval between these three movements was held in a currency by anyone.

Nothing in the settlement verification demonstrates behavior under a failed counterparty. Every movement above is between solvent holders acting in the ordinary course.

5.9 The rules of settlement.

1. **The whole-number rule.** What moves is a count of instruments, each carrying ten to the twelfth grains, and every instrument in the system carries that same count.

   g = 10^12 grains, identical across every stack

2. **The exactness rule.** Settlement requires exact whole counts on one accounting at the joint instant. There is no partial and no approximate settlement anywhere in the system.

   whole on both sides, or the transaction does not exist

3. **The two-sided rule.** Every movement is audited on both sides at the instant it occurs. Arrival equals departure or the movement is not recorded.

   arrival – departure = 0

4. **The conservation rule.** No movement creates, destroys, splits or alters an instrument. The total in the system is unchanged by any transfer.

   19,390,054,794 before, 19,390,054,794 after

5. **The finality rule.** The obligation is extinguished rather than reassigned. Nothing remains on either book afterward.

   what is left afterward decides which occurred

6. **The neutrality rule.** No currency is a term in any settlement. The entry currency of a stack is a fact about how its holder arrived and plays no part in what passes between holdings.

   three entry currencies across the chain, none appearing in either movement

7. **The interval rule.** A count held between two movements changes by nothing. The holder pays no cost for the time between transactions.

   the count received is the count payable

8. **The settlement rule.** Movement is settlement and never trade. No venue quotes an instrument and nothing bids on one.

   the count moves because an obligation was discharged, not because a price was struck

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6. The ecosystem's design and current layout.

The Operational Alkaimi Financial Ecosystem

On 1 September 2026 the Alkaimi financial ecosystem became fully active in wholesale settlement phase operations between licensed institutions.

This activated the recognition of value processes, the creation of DTAs, expansion of the walled garden's ledger, licensee custodial services, as well as traditional trade and settlement operations based on the ledgered value.

The Ecosystem's Operating Layers

The Ecosystem's licensee ring

During the ecosystem's design phase, it was determined that a maximum of 20 licenses would be issued, and the basic rules for license issuance were set. To qualify for license consideration, a licensed bank holding company, or group obtaining a number of retail bank operations must, at minimum, show a period of good governance characteristics. Further the operating retail bank locations conducting the Alkaimi model must have a capital reserve minimum above the 85% ratio, or have the capacity to meet that level via AAMS's Bulk to Bullion program prior to receiving operational approval from Alkaimi's Chairman's office.

Alkaimi issued its first four operating licenses in 2023, with the licensees engaged in joint testing of the operating nexus that forms the walled garden network.

Each licensee:

- Is chartered in its own jurisdiction under its own regulator.
- Maintains its own auditors and its own accounting standard.
- Carries a three-country-minimum acquiring mandate, so no licensee concentrates its footprint in one political geography.

The four licensees together hold 150 regional retail banks across fourteen countries, acquired across the United States, the European Union, Southeast Asia and Asia Pacific.

Retail banking operations are the ordinary banking services a community uses:

- deposit accounts,
- payments,
- settlement of everyday transactions,
- trade services

- and account custody for households and businesses in the bank's own market.

Every retail bank in a licensee's holding remains a bank of its own country. Each is chartered under its own national banking law, administered and examined by its own national regulator, and audited under its own national accounting standard. Alkaimi's license adds capabilities to these banks and removes nothing from the local regulator's administration.

Since network testing completed in 2025, each licensee has been engaged with Alkaimi Asset Management Services (AAMS) obtaining Class A+ gold bullion. The required capital has been procured from AAMS's managed reserves so that each licensee has received adequate Basel 3+ HQLA capable assets required to meet the capitalization requirements. Upon achieving this goal, each licensee has been approved to start Wholesale Settlement Operations. This activity ensure that Alkaimi's entire ecosystem's walled garden network meets Basel 3+ standing.

During the Wholesale Settlement Period all licensee operations are limited. Licensees may engage in the following:

- Traditional banking operations
- Conduct asset onboarding operations with approved issuers
- Conduct DTA creation with qualified select clientele (limited in scope)
- Assisting in DTA issuance procedures / management
- Ledger and Settlement operations
- Custodial Holding – DTAs
- Transmutation / Asset Management operations
- IP enforcement / Product development operations
- Walled Garden infrastructure deployment
- Acquisition of target market infrastructure
- Training internal personnel in preparation for planned consumer launch.
- Developing and proposing consumer products to Alkaimi, case use scenarios.
- Beginning marketing operations for approved consumer products, projected to commence late 2027 or early 2028 depending on the ledger's structure at that time.

Licensees are the only points at which the ecosystem meets the existing financial system. A currency arriving from an ecosystem client's operations is met at the licensee ring layer, and that currency does not progress into any other layer inside the ecosystem.

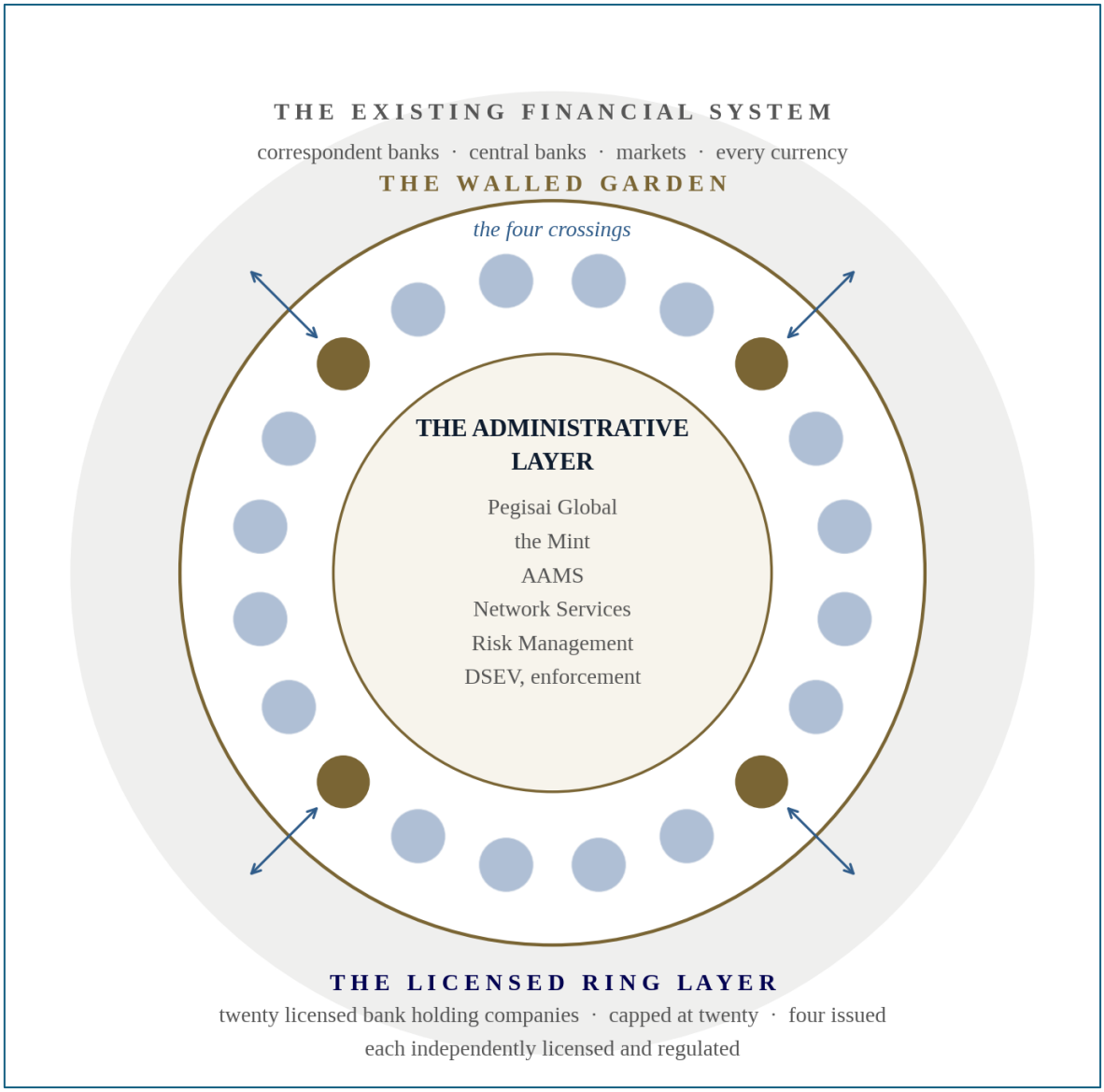

Figure 6.1. The ecosystem's two layers. The administrative layer at the center, the licensed ring layer around the administrative layer, the wall, and the existing financial system outside the wall. The four crossings are the licensees themselves.

During the pre-consumer market phase, Alkaimi's initial operating license holds special provisions providing each initial licensee certain abilities to expand their operations. Accordingly, licensee identities are not publicly released prior to the commencement of consumer market operations phase. Alkaimi's operating plan directs each licensee to market and engage its own clients under its own name and under its own regulators' requirements. IP protection and enforcement is conducted jointly by the licensee and the enforcement counsel identified at Section 10.8.

The administrative layer.

As illustrated in *figure 6.1,* the Alkaimi financial ecosystem has two operational layers. Pegisai Global and its subsidiaries operate the administrative layer of the combined ecosystem.

In simplified terms, the administrative layer issues Alkaimi operating licenses. Additionally, the administrative sets operating standard, procedural rules, structural and operational processes, and engages directly with government agencies relating directly to the DTA, and the ecosystem's technologies. It is also the arbiter of fact, and enforces operating guidelines. The administrative layer does not directly or indirectly engage in any financial conduct that requires licensure, or regulatory engagement in the conduct of local operations at the national level. Its operations are considered to be faciliatory in nature and administrative by engagement.

Since its inception Pegisai Global Holdings has cultivated the growth of Alkaimi's emergent technologies and expanding monetary capabilities. This included not only all of the required testing, infrastructure design and implementation, but also navigating the complicated legal and procedure challenges required to exceed Alkaimi's operational requirements. The DTA's HQLA status and legal operating status are but two of these examples.

In early 2023, Pegisai Global's advisory team foresaw the ecosystem's need for traditional HQLA reserves while also understanding that traditional gold procurement was the improper path. Accordingly, the advisory team began the long and arduous process of compiling the necessary and capable gold mines, recycling centers and established recognized but unfacilitated in ground reserves necessary to structure a managed reserve sufficient to meet the ecosystem's operational requirements. In 2025, those efforts became contractually codified and structured under AAMS's management.

In 2026 Pegisai Global has begun restructuring its divisional operations into stand-alone operating subsidiaries. These subsidiaries will operate:

- Network services / walled garden / security operations.
- DTA minting / compliance / ledger management operations.
- Government advisory / compliance / and regulatory engagement operations
- Other public facing media / marketing operations

Other administrative duties have already been delegated accordingly:

- Pegisai USA – US Government facing administrative entity / liaison and Media interface – Pegisai.Com / prior to Consumer Phase

- Pegisai Risk Management Asia – Ledger audit / compliance and risk abatement – underwriting services.
- Pegisai Risk Management Solutions USA - Physical gold operations: transport audit, process audit and chain of custody for every Bulk-to-Bullion movement.
- Alkaimi Asset Management Services – Asset management / gold reserve contract fulfillment operations, operator of Bulk-to-Bullion program.
- Digital Security Enforcement Ventures - Enforcement of the portfolio and of each licensee's right to operate, as set out at Section 10.8.

During 2026 Pegisai Global Holdings operations will, upon completion of its restructuring, focus on Alkaimi ecosystem operations.

The ecosystem as a neutral rail.

Section 8 compares what the alternative offers against what this rail carries. Before that comparison, the word neutral has to be earned.

Neutral, defined against agnostic.

The ecosystem opposes no currency, replaces no currency, and competes with no currency. It requires none inside settlement. It leaves every one of them usable at the edge. Neutral is the stronger word and it is the accurate one.

The neutrality is not a policy. It is a property of the construction. There is no currency inside settlement to be neutral about, so the position cannot be departed from by anyone acting inside the system.

What a rail is.

Between licensees, movement is a ledger entry. That is the whole mechanism. No correspondent chain, no intermediary standing along a route, no float held between departure and arrival, because there is no route and no interval.

A currency is met at a licensee and nowhere else. Where value must reach a script, the expression layer transmutes at the edge and the count itself never crosses.

Why neutrality is load-bearing rather than decorative.

A rule attaches to something, and where it attaches to a currency it travels wherever that currency travels. A settlement carrying no currency gives a currency-attached rule no currency through which to travel. That is a statement about where the rule attaches, not a claim about the rule, and nothing in this construction removes an obligation from any party.

Section 5 carried that from statement into record. Three movements, between holdings created in different years and different asset classes, with none of the entry currencies appearing in any movement and arrival equal to departure on both sides at every instant.

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7. Whole reserve banking: the history and Alkaimi's viable pathway.

Alkaimi's History, Status and Value

Alkaimi's genesis dates back nearly 29 years when its core founders individually began developing portions of the technologies and theories that has formed the foundation of the finished products foundation.

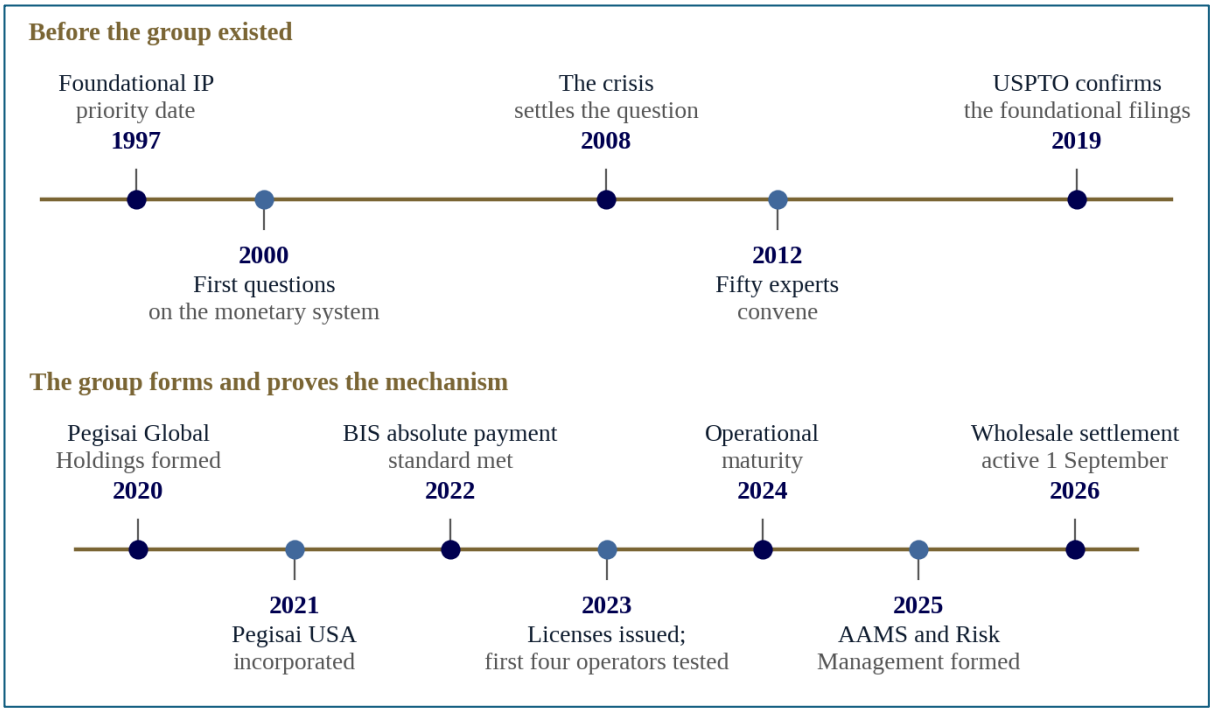

Figure 7.1. Twenty-nine years, in two rows. The dates in the upper row are the foundation. The dates in the lower row are the group forming, licensing and testing its operators, and opening wholesale settlement.

Early development

The Alkaimi financial ecosystem has been developed and deployed through its primary administrative and development layer, Pegisai Global Holdings, and its subsidiary companies. Alkaimi's intellectual property portfolio has been under continuous staged development since April of 1997. Our team realized in 2000 that the existing monetary system was becoming increasingly insolvent and unstable. By 2008, with rising government debt across the developed economies and the dollar carrying the reserve role, it became apparent that the dollar's purchasing power was on a path of continuous decline with no mechanism in the system to reverse it.

At that time, Alkaimi's design team began to assemble a group of like-minded experts with the end goal of determining the best course of action to correct systemic flaws in the global monetary matrix. In 2012 50 experts in law, regulation, economics,

technology, user experience, communications, governance and banking convened on one question: *"what it would take to restore value in the global financial system"*. Twelve years of research, development and testing followed, from the 2012 convening to the operational maturity of the licensed network in the third quarter of 2024.

In 2019 the United States Patent and Trademark Office confirmed the group's patent protection on the group's tokenization and data transport processes, the foundation of value transport technologies which have been under continuous development ever since that confirmation.

By late, 2019 the Alkaimi financial ecosystem's design architecture, product matrix, and operational processes were determined and became finalized over the following years testing.

The formal formation of Alkaimi's operating core.

In *2020, Pegisai Global Holdings* was established to license Alkaimi's operating technologies and to manage the ecosystem governance framework. *Pegisai USA* was incorporated in Wyoming in *August 2021* as the group's governmental communications and USA focused administrative entity.

Through *2022* the group engaged in system's engineering and testing ensuring operational durability and beta testing its security protocols. By the second quarter of *2022 Alkaimi's Digitized Tangible Asset (DTA)* became the first digital monetary to meet the *Bank for International Settlements'* absolute payment standard. The absolute payment standard requires that settlement be final, irrevocable and unconditional. Meeting this standard was one of Alkaimi's Design Team's primary goals, and established the fundamental capabilities of the total system.

Relevance of Achievements.

Before 2022 no privately created instrument had met the same standard central bank instruments meet. In the second quarter of 2022 the *DTA* became a privately created, asset-backed monetary mechanism which sits in the same category reserved for central bank reserves. No other private party has met that standard since 2022.

A licensee posts the DTA it holds as Level 1 high quality liquid assets without discount, on Alkaimi's recommendation for each DTA stack from that stack's underwriting, and the licensee's regulator sees the DTA as posted. Alkaimi's licensees therefore meet the banking system's liquidity standard with an asset that carries no currency and moves within the ecosystem's ledger by one entry.

Alkaimi's accomplishment matters because Alkaimi's licensees are chartered banks operating under the Basel rules. Basel III, in force from 2013 to 2018, requires a bank to hold liquid

assets covering 30 days of stressed withdrawals, stable funding for one year, and capital against every risk on the bank's books. Basel III+, the completion of that framework, removes the bank's ability to set its own risk weights, and it is Basel III+ that the United States has not implemented.

Under the *Bank for International Settlement's Basel III+ rules* Alkaimi's DTA can be categorized as Level 1 HQLA value without any applied discount. Alkaimi's licensees therefore meet the banking system's liquidity standard with an asset that carries no currency, and is easily transferred within the ecosystem's operational ledger.

Basel 3+ compliance relevance

Alkaimi's accomplishment matters because Alkaimi's licensees are chartered banks operating under the *Bank for International Settlements Basel III+ rules*. *Basel III+* requires a bank to hold liquid assets covering thirty days of stressed withdrawals, stable funding for one year, and capital against every risk on the bank's books.

Silicon Valley Bank, Signature Bank and First Republic Bank were exempt from *Basel 3's* liquidity rule under the United States' 2019 tailoring and all three failed in 2023. *Credit Suisse* was under *Basel 3's* full framework and was forced into UBS in March 2023.

Today, *JPMorgan Chase, Bank of America, Citigroup, Wells Fargo, Goldman Sachs and Morgan Stanley* are not operating under the completed *Basel 3* framework, because the United States has not finalized Basel III. The United States *Basel III* finalization is expected late 2026, implementation 2027.

Alkaimi's licensees operate in compliance with the superior Basel 3+ standard now.

The Basel III standard allows a bank compute its own risk with the bank's own models, and the largest banks such as *JPMorgan Chase, Bank of America, Citigroup, Wells Fargo, Goldman Sachs and Morgan Stanley* favor those models, *but still fail to meet Basel III's rules.*

Basel III+ removes the bank's ability to calculate its own risk. *Under Basel III+:*

A. A bank's modeled risk cannot fall below 72.5 percent of the standardized calculation.

B. Operational risk is measured one way for every bank.

C. The bank's trading book is capitalized under the Fundamental Review of the Trading Book, a Basel Committee standard.

    a. That standard fixes the boundary between the trading book and the banking book.

b. That standard raises the capital held against market risk.

The Basel Committee set *1 January 2023* as the implementation date for *Basel III+*. As of September 2025, about 80 percent of the Committee's 27 member jurisdictions have the *Basel III+* output floor in effect. As of August 30, 2026, the United States has not implemented any element of Basel III+. On *March 19, 2026,* the United States published a re-proposal attempting to reduce capital requirements rather than completing the standard, with finalization of this modified expected late 2026 and implementation in 2027.

- The United Kingdom published final rules on 20 January 2026 with a start date of 1 January 2027.
- As of the Basel Committee's last report, published September 2025, India, South Africa and Turkey had implemented no element of Basel III+.

Alkaimi's final Statement on Basel 3+ compliance

From its first DTA engagement date, every Alkaimi licensed financial institution meets Basel III+ compliance standards.

Ironically, six of the worlds most recognized US based banking institutions, JPMorgan Chase, Bank of America, Citigroup, Wells Fargo, Goldman Sachs and Morgan Stanley, fail to meet this standard and all of them remain under their own capitalization formulas under rules established more than 13 years ago. A lot has changed in the past 13 years.

In those 13 years former globally dominant financial institutions failed. Silicon Valley Bank, Signature Bank and First Republic Bank could not meet Basel III's liquidity rule because each held long-dated securities funded by deposits that left in days, and their securities holdings lost value when rates rose. Issues that do not affect any Alkaimi licensed institution.

Credit Suisse, despite being in full compliance with Basel III and reporting a common equity tier 1 ratio of 14.1 percent at the end of 2022, failed in March 2023 because the framework counted capital that was not there.

- On 15 March 2023 Saudi National Bank, Credit Suisse's largest shareholder at 9.9 percent, stated publicly that regulatory limits prevented any further support. 35 billion dollars of deposits left the bank in three days.
- On 19 March 2023 the Swiss Federal Council forced Credit Suisse, a 167-year-old institution founded in 1856, into UBS for 3.25 billion dollars in an all-share transaction.

Sixteen billion Swiss francs, about 17 billion dollars, of Credit Suisse's additional tier 1 bonds were written to zero by the Swiss regulator.

- Saudi National Bank recorded a loss of approximately one billion dollars on a stake acquired five months earlier.
- Qatar Investment Authority, the second-largest shareholder at 6.8 percent, recorded a loss of approximately 330 million dollars on its equity stake, on Reuters' calculation, and sought legal advice on a claim against Switzerland under the Swiss-Qatari investment treaty.
- Saudi National Bank paid 1.4 billion Swiss francs, about 1.5 billion dollars, in November 2022 at 3.82 francs a share and received 0.76 francs a share, a loss of about 1.2 billion dollars, eighty percent of the investment.
- Middle Eastern shareholders together held more than 20 percent of Credit Suisse and took the largest hit of any group.

Credit Suisse was dissolved as a legal entity on 31 May 2024.

In July 2023 United States regulators calculated that the largest United States banks required 16 to 19 percent more capital. The banks lobbied against the calculation until the requirement was reduced, away from the standard, in March 2026. The reduction leaves the shortfall where a failure finds it.

- In a failure, United States resolution law pays insured depositors first, requires uninsured creditors to absorb losses before any public support, and reaches public support only by a discretionary exception, which is what the Treasury, the Federal Reserve and the Federal Deposit Insurance Corporation invoked on 12 March 2023 for Silicon Valley Bank and Signature Bank. An exception is a decision, not a right.
- A GCC nation’s dollar deposits and correspondent balances at such a bank, including balances from crude trade clearings, are unsecured claims that absorb losses in a resolution unless an exception is granted. Assets in custody remain the nation’s property but are recovered through the resolution rather than paid on demand. In either case the nation’s recovery depends on a decision taken in Washington on the day.

Alkaimi’s hidden value proposition.

Whole Reserve Banking with Liquidity.

Alkaimi’s value recognition method, coupled with its tangible asset digitization process creates an absolute payment (and value) mechanism. This mechanism

exceeds Basel III+ requirements at the bank's capital reserve level. However, Alkaimi licensed banks don't operate as fractional lending institutions. The DTA creation process is the methodology used to create liquidity, as well as a payment mechanism for transactions. Alkaimi's operating matrix restores whole-reserve banking while correcting its core weakness, liquidity creation.

Alkaimi's technologies, processes and applied existing law allow licensed Alkaimi banks to create liquidity from previously under-valued, or unrecognized assets. Alkaimi's Administrative operating mandate, enforced by Pegisai Global at the license authorization level directs each licensee to engage in whole-reserve banking operations. This is historically relevant because:

- Full-reserve banking was the original form of banking.

  The Bank of Amsterdam, founded in 1609, opened as a bank of deposit that held coin and bullion against every deposit and issued claims only against what the bank physically held. From 1657 the bank allowed overdrafts and lent large sums to the City of Amsterdam and to the Dutch East India Company, and the bank kept those loans confidential. The Company defaulted on its advances after the Fourth Anglo-Dutch War, and the bank was insolvent by the end of 1790. The City of Amsterdam took control in 1791 and the bank was liquidated in 1819. The bank failed because its operators broke the full-reserve rule in secret, not because the rule failed.

- Full-reserve banking could not create liquidity.

  The money supply was the metal stock. A depositor's claim was a claim on priced metal, and the claim lost purchasing power whenever the metal's price moved.

- Fractional banking replaced full-reserve banking because fractional banking could create liquidity.

  Seventeenth-century goldsmiths discovered that depositors rarely came for their metal all at once, and lent out what they were holding for others. Liquidity expanded. Solvency became a probability. Every banking crisis since has been the day the probability failed, and the March 2023 failures of Silicon Valley Bank and Signature Bank, set out below, are the most recent.

- The last attempt to restore full-reserve banking failed on the same problem.

> The Chicago Plan of 1933 proposed one hundred percent reserves in central bank money. The plan required the central bank to create reserves equal to every deposit in the system, and no government would carry that.

Analysis: Why the Chicago Plan of 1933 failed.

The Chicago Plan of 1933 was a viable effort to return control of the US dollar back to the United States government. However, the plan had a few requirements in order to work properly:

1. The Chicago Plan asked the United States government to stand behind the entire deposit base of the country.
2. The plan required the central bank to carry one hundred percent reserves in central bank money, which meant the Federal Reserve had to create reserves equal to every deposit in every bank.
3. Effectively, the plan required the United States government to become the guarantor of every bank deposit and, in effect, the sole issuer of every dollar.

The plan was not well received by politicians or the banking cartel and these groups joined forces and eventually stopped the plan. Politicians didn't agree with the plan because the cost of the reserve fell on the government. Further the bank cartel fought the plan, because every bank's earnings came from lending deposits. The American Bankers Association warned Congress against political control of banking. In response the politicians in Washington developed a "cheaper path" by legislation.

- *The Banking Act of 16 June 1933 gave depositors federal deposit insurance and left fractional-reserve banking intact.*
- *Deposit insurance stopped the bank runs without the government taking on the reserve.*

The Chicago Plan of 1933, the push to restore full-reserve banking in the United States did not die for lack of merit. The Chicago economists' memoranda of March and November 1933 reached President Roosevelt, Senator Cutting carried the plan into Congress in 1934 and 1935, and Irving Fisher campaigned for one hundred percent money for the rest of the decade. Every version of the plan failed on the same clause:

- *The United States government had to supply the reserve.*

The Chicago Plan was never refuted. It was refused, because the 1930s pre-Bretton Woods United States Congress refused to allow the United States government to carry the full obligation of every bank deposit and US dollar in circulation. Ironically, now

in 2026, more than 93 years later, the United States government carries the whole obligation that the 1930's Congress refused to carry.

In 2026, the United States government holds the obligation the Chicago Plan asked it to hold, and holds it with no tangible asset reserve behind it. The Federal Deposit Insurance Corporation insures deposits by statute.

- On 12 March 2023, the Treasury, the Federal Reserve and the Federal Deposit Insurance Corporation invoked the systemic risk exception and covered every uninsured depositor at *Silicon Valley Bank* and *Signature Bank* in full.
- Since 26 March 2020, the Federal Reserve's reserve requirement has stood at zero percent, so a deposit at any United States bank rests on the government's guarantee and on no liquid reserve.

Today, the Federal Reserve issues the base money (US dollar). Every United States bank creates deposit money under a federal charter, against reserves only the Federal Reserve can create, with the Federal Reserve as lender of last resort behind every one of them. The government refused this reserve arrangement in 1933 and then bit by bit took on the guarantee in the decades that followed.

Why Alkaimi's Whole-Reserve Model won't fail.

Alkaimi's whole reserve model doesn't rely on any government for monetary mechanism issuance or any government for capital reserves. Alkaimi's value recognition method invites an asset holder to bring in assets, which are then structured as segmented reserve components.

- a portion of a proven commodity field,
- a material deposit
- a commodity stockpile

Each a viable asset class which the holder already owns. Alkaimi then establishes using their process, a granular value which states a whole-value of that recognized asset.

Alkaimi then issues DTAs containing that whole value, a value that is segregated and segmented from any other whole value within the Alkaimi ledger. No central bank is asked to create anything. No treasury is asked to guarantee anything. No legislature is asked to pass anything.

Recognition establishes the whole value of the asset in grains. An underwriter then signs for 0.90 of that recognized value under Alkaimi's underwriting and surety terms.

The Mint, a division of Pegisai Global Holdings, issues the Digitized Tangible Assets at 0.80 of the recognized value. The segmented portion of the asset sits in the DTA stack with drawing rights against the asset's production if the issuer fails to redeem or cancel the DTA after issuance. The issuer carries that obligation and the annual fees.

The obligation that the United States Congress refused to place on the government in 1933 sits with the underwriter at recognition, before a single DTA is issued. No treasury is asked to carry it because a party inside the process already does.

Title to the asset portion is verified in the audit and again in the issuance process. A prior lien on the asset is removed in the issuance process: the lien is counted in grains at the issuance instant and extinguished by delivery of DTAs to the lien holder, and the remainder of the issue is released to the issuer. Where a lien holder will not take DTAs, the portion needed for release moves to the licensee's accounts, segmented for transmutation, and the licensee pays the lien holder in currency at additional fees.

The obligation that stopped the Chicago Plan in 1933 does not exist in the Alkaimi model, because the reserve is the asset holder's own, and the liquidity is created from that reserve rather than lent against it. That is why Alkaimi names its model whole-reserve banking with liquidity rather than the historic name of "full-reserve banking".

Full reserve named a coverage ratio:

> *what fraction of a bank's claims was held in money or metal, and that money or metal was issued by a government or priced by a market.*

Alkaimi's Whole reserve names what the reserve is:

> *the entire recognized value of the asset holder's own asset, held whole, issued by no government and priced by no market.*

In *Alkaimi's Whole Reserve model* the liquidity comes from recognizing more of what is owned, never from lending out what is held. The Value in Settlement is this segmented whole value moved from one account to another within the ledger system. Transmutation of denominations occurs when a party wishes to remove their held value from the ledger. At all times whole-reserve / whole-value is held within the DTA itself, on the Alkaimi ledger within the walled garden ecosystem.

Two operations are distinct. Expression is the reading of a DTA in a chosen currency at a chosen instant; expressions float with the currencies, and the grains beneath them do not move. Transmutation is the conversion of a holding into a currency, performed through a licensed bank at the holder's instant, a currency event at the edge that does not reprice the value held. No venue exists inside the ledger to bid on a grain, so no

market price of a grain exists. The holder who transmutes receives the currency expression of his holding at that instant.

Settlement is always in grains, account to account, inside the ring. Transmutation happens at the ring, at the request of the specific grain and account holder, and only there does currency exist. On that request the holder's DTA holding moves to the licensee's accounts, segmented for transmutation, and the licensee pays the holder currency. The segmented holding is then a licensee DTA and remains one until the licensee releases it back into the larger ledger. The licensee runs transmutation as a foreign-exchange desk: currency comes in when a party acquires a grain position, and currency goes out when a holder transmutes.

A licensee's currency comes from four places. The first is the licensee's own currency book, since every licensee is a chartered bank. The second is currency brought in by parties acquiring grain positions to settle inside the ring, which is the wholesale phase. The third is deposits, paychecks and receipts brought in by account holders moving out of a debasing currency, which is the consumer phase; at that level the licensee acts as vault account manager at the application level and takes in currency directly as part of the DTA process. The fourth is funding between licensees, since licensees may lend currency to each other.

Where a licensee needs currency beyond those four sources, the licensee has two options and takes the better one for its cash and collateral position across its total operations: it pledges the DTAs it holds after transmutation to its central bank, since the DTA is posted as a Basel III+ high-quality liquid asset, or it borrows against conventional collateral. The rate the licensee pays its central bank sits below the charge the licensee makes to the holder in transmutation. The issuer of a currency is the primary backstop for that currency, because currency comes from its issuer. The value held in a DTA never relies on a central bank. The ring of licensees faces outward at transmutation and currency only, and that is the only place a central bank comes into play.

- Alkaimi's reserves are always liquid.
- Full reserve banking could not create liquidity, and fractional banking could not hold it on the day depositors came for it.
- Alkaimi's value recognition method, DTA, and walled garden financial system end both failures.

A regulator sees the DTA as the licensee has posted it in its books. Alkaimi makes a posting recommendation for each DTA stack from that stack's underwriting, in accordance with the Basel rules, and a DTA held by a licensee is posted as a Basel III+

high-quality liquid asset on that recommendation. The Basel Committee's cryptoasset standard does not reach the DTA. The cryptoasset standard covers private digital assets that depend on cryptography and distributed ledger or similar technologies, and it excludes dematerialized securities kept on centrally administered electronic registers. Alkaimi uses no blockchain, and Pegisai Global Holdings administers the ledger centrally.

In the United States the DTA holds the status of a bearer instrument under Article 8 of the Uniform Commercial Code. Across borders the ledger's governing law is the law named in the Alkaimi account agreement between the account holder and Pegisai Global Holdings as intermediary. The Hague Securities Convention, in force since 1 April 2017, gives effect to the law expressly agreed in an account agreement where the intermediary keeps a qualifying office in that jurisdiction, and Pegisai Global Holdings keeps one. The UNCITRAL Model Law on Electronic Transferable Records, adopted in 2017, gives transferable instruments legal effect in electronic form; Bahrain enacted it in 2018 and the Abu Dhabi Global Market in 2021. The UNIDROIT Principles on Digital Assets and Private Law, adopted in May 2023, provide that the system on which a digital asset is recorded may name the governing law and that control of the asset perfects a security right in it. Only the Alkaimi ledger changes control of a DTA.

Intelligent design corrected two issues

Alkaimi's operating matrix corrects the two issues that ended the two prior models: full-reserve banking could not create liquidity, and fractional banking could not hold the reserve on the day depositors came for it. The reserve behind an Alkaimi licensee is recognized value held whole in each DTA stack, counted in grains. Liquidity is created by recognizing more assets into the ledger via the DTA creation process, not by lending the same asset several times, so the ledger grows without leverage.

- The Alkaimi ledger's reserve is not denominated in a priced metal or an issued currency, so Alkaimi's ledger reserve does not erode while held.
- No central bank supplies the ledger's reserve, so the Chicago Plan's obstacle does not arise.
- An Alkaimi licensee cannot lend the ledgered reserve out, because segregation and segmentation place every holding in each DTA stack and nothing crosses between DTA stacks.
- The pooling that fractional lending requires is absent from the Alkaimi architecture rather than prohibited by a central bank or Bank for International Settlements rule.

- And an Alkaimi licensee earns fees on value recognition and DTA custody and settlement rather than a spread on lending against the ledgered reserve, so no licensee has a reason to want the ledgered reserve out the door.
- No licensee sets the value on which it earns. The value a licensee is paid on is established by audit and recognition, signed for by the underwriter at 0.90 and issued by the Mint at 0.80, so no licensee earns on a value the underwriter has not signed for and the Mint has not issued.
- No licensee can issue a claim against a DTA in its custody. The operating agreement each licensee signs on acquiring an Alkaimi operating license bars it, and a violation suspends the license. Pegisai Global Holdings manages the ledger, and only the ledger moves a DTA or changes its control, so a promise a licensee makes outside the ledger attaches to nothing. The Bank of Amsterdam failed on a rule its operators could break in secret; an Alkaimi licensee holds a rule the ledger enforces on every entry.
- Client value is always on the ledger. A client reaches his holding through a licensee, and if that licensee is suspended his access moves to another licensee. A licensee's failure does not reach a client holding, because the holding was never on the licensee's books.
- A bank holding a currency loan book is paid in a unit that loses value while the loan runs, whenever the debasement rate of that currency exceeds the real return on the loan. A bank holding whole value is not. Under that condition an existing bank takes an Alkaimi license. Transmutation demand falls as the ledger grows: a settlement between two ledger participants needs no transmutation, and once DTAs are prevalent the majority of transactions at scale occur in grains, much as credit card charges are done now.

An Alkaimi licensee is therefore solvent the way the Bank of Amsterdam was solvent for as long as it kept the full-reserve rule, and liquid the way a fractional bank is liquid, and the reserve behind both properties is value that does not move.

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8. The creation of liquidity.

Alkaimi's value recognition method creates liquidity, and the liquidity it creates meets the same standard central bank instruments meet.

This section states the comparison a commodity holder can make for himself. Two questions decide it, and neither is a rate.

Question 1: How much liquidity does the asset actually produce.

And

Question 2: What can the asset still do afterward.

The section then compares the traditional pathways against Alkaimi's system, states what the liquidity costs across a stated ten-year window, and states the standard the liquidity qualifies.

8.1 How much liquidity the same asset produces.

Alkaimi's value recognition method sizes against the asset. The method has named stages and they belong to different parties. Recognition establishes the whole value. The underwriter then signs 0.90. The Mint then issues 0.80 of it, and the balance stands unreleased in the ledger, released later against a record rather than withdrawn against a price move.

Reserve-based lending, prepayment, streaming and commodity trade finance size against something other than the asset.

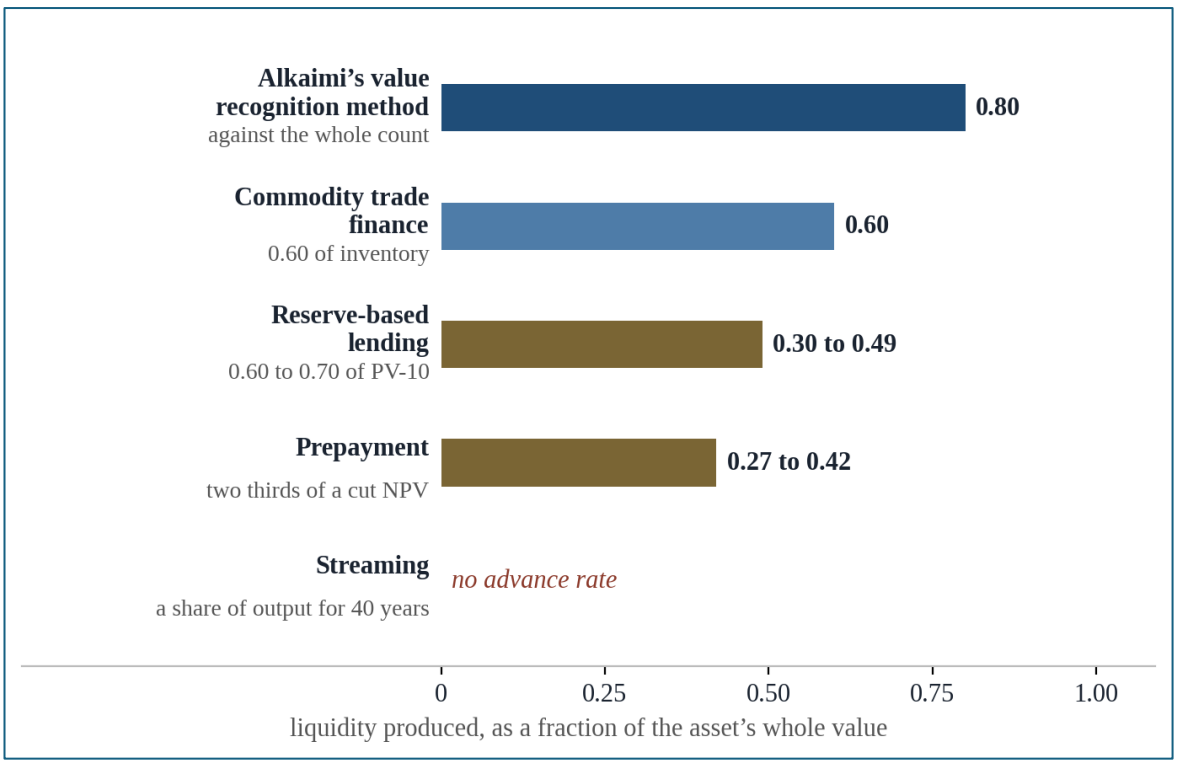

Figure 8.1. Liquidity produced against the same asset. The traditional ranges compound their own haircuts.

Read the reserve-based lending and prepayment rows of Figure 8.1 carefully.

Reserve-based lending advances 60 to 70 percent of PV-10. PV-10 is not the value of the asset. It is the present value of estimated future net revenues, after production costs, development costs and abandonment costs, discounted at ten percent, at a price deck the lender sets conservatively.

So, the advance is a fraction of a fraction, and on undeveloped reserves the first fraction falls to 20 to 40 percent.

Prepayment is the same shape with an additional layer. Drawings cannot exceed two thirds of a covered net present value, and that net present value is computed on eighty to ninety percent of the forward strip, discounted at ten percent.

And the base is disclaimed by the parties who publish it.

Issuers state in their own annual filings that PV-10 is not a substitute for the standardized measure and does not purport to represent the fair value of their reserves. Valuation practitioners state that PV-10 does not necessarily represent fair market value.

Pathway	Advances against	Fraction applied	Result, as a fraction of whole value
Alkaimi's value recognition method	The recognized whole count	The underwriter signs 0.90. The Mint issues 0.80.	0.80
Commodity trade finance	Inventory at mark to market	0.60 of inventory	0.60
Reserve-based lending	PV-10, taken at 0.50 to 0.70 of whole value	0.60 to 0.70 of PV-10	0.30 to 0.49
Prepayment	A net present value on 0.80 to 0.90 of the forward strip,	Two thirds of that net present value	0.27 to 0.42

	on the same PV-10 share		
Streaming	No advance rate. A share of production for 40 years, at a quarter of spot	—	No advance rate

Table 8.1. The arithmetic behind Figure 8.1. Each result is the stated fraction applied to the stated base. The reserve-based lending and prepayment rows rest on the stated assumption of PV-10 at 0.50 to 0.70 of whole value, and a reader who substitutes his own share will find the ordering unchanged at any plausible value.

> The measure the lending industry advances against is one its own users decline to call a value. Alkaimi's value recognition method advances against the asset. The base each advances against is the difference, and the difference is one of kind rather than of degree.

8.2 What the asset can still do.

This is the question that never appears on a term sheet, and it is the one that decides whether a holder can respond to anything that happens next.

Pathway	What is taken	What the holder may still do with the asset
Alkaimi's value recognition method	Nothing. The asset is not sold and not restricted.	Sell it, process it, recognize further against it, or leave it in the ground
Reserve-based lending	Mortgage over 85 percent of properties; the remainder reserved to the lender	Nothing without consent. Covenants reach operating decisions
Prepayment	All production for the term; equity of the borrower and its subsidiaries pledged	Produce and deliver to one buyer for 48 months
Streaming	A share of production for 40 years, at a quarter of spot	Operate, and deliver. The share survives the deposit

Pathway	What is taken	What the holder may still do with the asset
Trade finance	Title over goods, receivables assigned, accounts controlled and swept	Trade under an independent collateral manager, and hedge as required

Table 8.2. What each pathway takes, and what remains available to the holder afterward.

Four of the five take title, output or both. One takes neither.

> An encumbered asset cannot be brought forward a second time. Whatever a holder finances against reserve-based lending, prepayment, streaming or a borrowing base is committed for the term, so the same asset cannot answer the next requirement when it arrives.

8.3 The test stacks, against the four pathways.

The ten stacks of this document are the worked case. Each is a real holding at a stated quantity, recognized at a stated whole value, and each would have been offered one of the four structures of this section.

8.3.1 The crude oil stack.

The crude oil stack holds 51,070,265 barrels, recognized at 3,728,856,691 units, created 2 September 2021 and entered on the Russian ruble. At the creation instant that value read as 3.7289 billion United States dollars equivalent, at 73.01 dollars per barrel, IMF series POILAPSP for September 2021.

Under Alkaimi's value recognition method the whole value is established at that figure, the underwriter signs 0.90 of it, and the Mint issues 0.80, with the balance standing unreleased in the ledger.

Under reserve-based lending, the same barrels support 60 to 70 percent of a PV-10 that is itself a discount, redetermined semiannually at the lender's sole discretion, with 70 percent of the properties mortgaged and the rest reserved. In the window this stack lived through, the redetermination dates fall inside the sharpest energy dislocation in the record.

Under prepayment, the same barrels support two thirds of a net present value computed on eighty to ninety percent of a forward strip, and the entire offtake goes to one trading house for the term.

What the redetermination clause means in this particular window.

This stack was created 11 weeks before the ruble began the largest move in the set. Its window contains the widest currency spread and the sharpest pairwise movement in the document. A borrowing base redetermined semiannually into that period, at a lender's sole discretion and with unscheduled redeterminations permitted, is a facility that can shrink at exactly the moment the holder needs it.

> The recognized count did not move at all across that window. *Section 4.6* records it: 0.00, across 1,778 days.

8.3.2 The gold stack.

The gold stack holds 75 metric tons of fine gold, recognized at 4,143,174,102 units, created 11 March 2021 and entered on the United States dollar. At the creation instant that value read as 4.1432 billion United States dollars equivalent, at 1,718.23 dollars per troy ounce, IMF series PGOLD for March 2021.

This is the class where streaming is the offered structure, and streaming is the harshest of the four. A financier pays a quarter of spot for every ounce delivered, takes a percentage of production for 40 years, imposes a leverage covenant, and leaves the price volatility with the producer through a liability revalued every reporting period.

Gold was chosen as the largest stack in the run for exactly this reason. Gold is the scarcest of the ten classes, the hardest of the ten to source at institutional grade, and the one where the traditional alternative takes the most. Demonstrating the mechanism at the hardest end is what makes the claim credible everywhere else.

8.3.3 The wheat chain.

The wheat stack holds 2,059,454 metric tons of hard red winter wheat, recognized at 497,180,892 units, created 15 August 2023 and entered on the euro. At the creation instant that value read as 497.18 million United States dollars equivalent, at 241.41 dollars per metric ton, IMF series PWHEAMT for August 2023.

This holder does the whole cycle inside this document. He is paid 24,141,387 instruments for 100,000 metric tons of wheat in movement two, holds them, and pays 23,863,620 of them onward for 2,400 metric tons of copper in movement three, retaining 277,767.

Under commodity trade finance, the same position sits at 60 percent of inventory at mark to market, under an independent collateral manager, with title assigned, accounts swept, hedging mandated, and a margin call available to the lender whenever the wheat price moves against the facility.

> The wheat holder converted nothing, hedged nothing and funded nothing between receiving and paying onward. Under a borrowing base he would have been required to hedge as a condition of drawing, and could have been called for cash in the interval.

8.4 The case in figures. Ten years of liquidity, costed three ways.

This case is a stated hypothetical, costed backward from the public record. A GCC nation recognizes a 30 billion United States dollar portion of its hydrocarbon reserves in mid-2016 through Alkaimi's value recognition method and holds the position for ten years, to mid-2026. Qatar is the example, and *Section 9* carries the region's case in full. This subsection takes the costs alone.

The comparison is liquidity against liquidity.

A recognized holding is not compared against currency left in a vault, because a nation raising liquidity at national scale does not already hold the currency. The comparison is against the instrument a sovereign actually uses to raise liquidity, and against what raised balances pay while a program spends them.

Alkaimi's value recognition method creates the liquidity at recognition and prices it as fees rather than as a loan.

Formation is paid once, at creation. Maintenance is paid annually, and *Section 2* states the annual fees as the whole of the maintenance obligation. Across the ten years the total functional cost runs between 14 and 18 percent of the recognized value. On 30 billion recognized that is 4.2 to 5.4 billion dollars, no principal exists, nothing falls due at the end, and the reserve stays owned and unencumbered throughout. Issuance follows the Mint's discipline ratio: 24 billion of the recognized 30 is issued as immediately usable liquidity, and the 6 billion balance stands unreleased in the ledger, released later against a record rather than withdrawn against a price move.

The debt side is the instrument Qatar sold.

In May 2016 Qatar issued 9 billion dollars of bonds, at that date the largest government bond issuance in the Middle East, and the ten-year tranche carried a 3.25 percent coupon maturing 2 June 2026. The life of that tranche is this case's window. At the same coupon, 30 billion borrowed pays 975 million dollars a year, 9.75 billion across the ten years, 32.5 percent of principal, and on 2 June 2026 the 30 billion falls due, repaid or refinanced at 2026 rates. The bond, like Alkaimi's value recognition method, leaves the reserve untouched. What separates the two is the cost, and the principal wall at the end.

The third cost is charged by nobody and appears on no term sheet.

Balances raised and held while a program spends pay the price level of the currency in which they are held.

Measured against each economy's own published index from June 2016 to June 2026:

a. the dollar lost 27.8 percent of its purchasing power (Bureau of Labor Statistics CPI-U, 241.018 to 333.9);

b. the euro lost 24.1 percent (Eurostat harmonized index of consumer prices, June annual rates 2017 through 2026 compounded);

c. the ruble lost 46.0 percent (Rosstat, the same method, closing at 6.02 percent for June 2026);

d. the yuan lost 12.2 percent (National Bureau of Statistics, the same method);

e. and the Qatari riyal lost 11.4 percent (National Planning Council index, 2018 base, 97.6 to 110.12).

A dollar bond raises dollars, so the dollar curve is the curve the program pays.

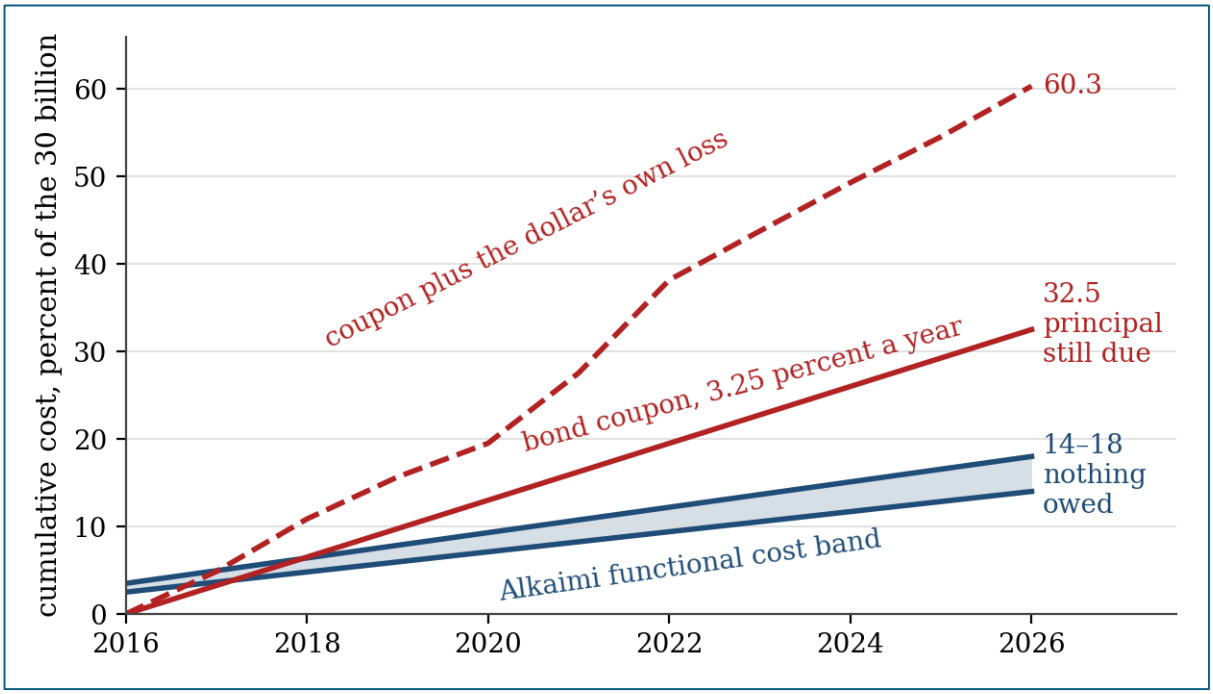

Figure 8.2. Three costs of ten years of liquidity on 30 billion United States dollars, 2016 to 2026. The Alkaimi functional cost band runs from formation at creation to between 14 and 18 percent total, with nothing owed at the end. The coupon line is Qatar's own May 2016 ten-year coupon of 3.25 percent applied to 30 billion, with the principal still due at maturity. The dashed line adds the dollar's measured loss of purchasing power to the coupon.

Ten years out, the Alkaimi functional band stands at 14 to 18 with nothing owed.

1. The coupon alone stands at 32.5 with the principal still due.

2. The coupon plus the dollar's own loss stands at 60.3.
3. The ordering does not depend on the coupon chosen: the coupon that halves the gap still leaves the principal wall, and no coupon removes the curve beneath it.

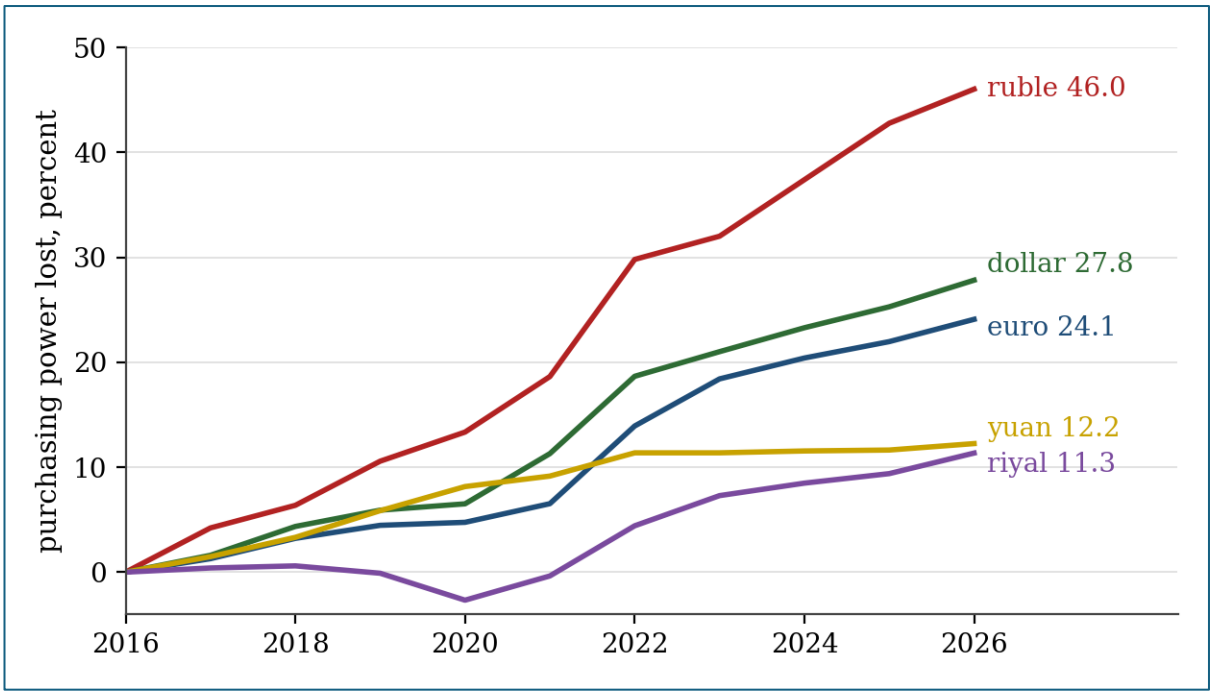

Figure 8.3. What a held balance paid, by currency, June 2016 to June 2026. Each line is the cumulative loss of purchasing power measured against the price level of the currency's own economy, from the statistical authority named in the sources of this subsection.

	Alkaimi's value recognition method	The ten-year bond
What is raised against	The asset. 30 billion recognized at whole value.	The sovereign's credit. 30 billion principal.
Liquidity delivered	24 billion issued at the Mint's 0.80 discipline ratio; the 6 billion balance stands unreleased in the ledger, released later against a record.	30 billion at settlement of the issue.
Cost across ten years	4.2 to 5.4 billion in formation and annual maintenance, 14 to 18 percent of the recognized value in total.	9.75 billion in coupon, 32.5 percent of principal, at the May 2016 ten-year coupon of 3.25 percent.

Due at the end	Nothing. No principal exists.	30 billion on 2 June 2026, repaid or refinanced at 2026 rates.
The asset reserve	Owned and unencumbered throughout. A further portion can be recognized when the next requirement arrives.	Untouched by the bond. The liability stands beside it on the sovereign's book.
What held balances pay	The recognized value does not move while held. Section 4 measures it at 0.00 across ten stacks.	The price level of the holding currency. The dollar's decade cost 27.8 percent.

Table 8.3. The case in dollars, on the 30 billion hydrocarbon recognition, 2016 to 2026.

Position held, June 2016 to June 2026	Purchasing power lost	Nominal gain to break even
Dollar	27.8 percent	38.5 percent
Euro	24.1 percent	31.7 percent
Ruble	46.0 percent	85.3 percent
Yuan	12.2 percent	14.0 percent
Qatari riyal	11.4 percent	12.8 percent
DTA	0.00 percent	0.00 percent

Table 8.4. The decade for a held balance, June 2016 to June 2026, measured against the price level of each currency's own economy. Break-even is the nominal gain a position needed to report to have lost nothing. The recognized value does not move by construction, and Section 4 carries the measured record.

One boundary is stated plainly.

The verification run of this record proves the lock across 1,953 days, at Section 4. This case states costs across a stated ten-year hypothetical against public figures. The first is evidence. The second is arithmetic any reader can rework from the sources named at the end of this subsection

Sources for this subsection. State of Qatar May 2016 international bond issuance, ten-year tranche coupon and maturity, from the issuance record. United States Bureau of Labor

Statistics, CPI-U all items index, June 2016 and June 2026. Eurostat, harmonised index of consumer prices, euro area, annual rates. Federal State Statistics Service of the Russian Federation, consumer price index, annual rates. National Bureau of Statistics of China, consumer price index, annual rates. National Planning Council of the State of Qatar, consumer price index, 2018 base.

8.5 The standard the liquidity meets.

The liquidity created at recognition is not a claim on a bank and not a promise to pay. It is held value, and it qualifies where the strictest categories sit.

Two qualifications carry the statement.

First, a licensee posts the DTA it holds as *Level 1 High-Quality Liquid Assets* with no applied discount, on Alkaimi's recommendation for each DTA stack from that stack's underwriting, and the licensee's regulator sees the DTA as posted. That is the class reserved for central bank reserves. A licensee holding DTAs therefore meets the banking system's liquidity standard with an asset that carries no currency.

Second, in the second quarter of 2022 the DTA met *the Bank for International Settlements absolute payment standard:* settlement final, irrevocable and unconditional. Before that date no privately created instrument had met the same standard central bank instruments meet, and no other private party has met it since 2022.

For the comparison of this section the consequence is stated once. The four traditional pathways deliver a liability that must be serviced. Alkaimi's value recognition method delivers an asset that sits in the same category reserved for central bank reserves.

8.6 What the pathway comparison establishes, and what it does not.

The comparison establishes four things. A commodity holder is offered reserve-based lending, prepayment, streaming or a borrowing base.

- Every one of the four sizes against a discounted derivative of the asset rather than against the asset.
- Every one of the four encumbers: of the five pathways in this section, four take title, output or both, and one takes neither.

The measure the lending industry advances against is disclaimed as a value measure in the filings of the companies that publish it. And all four depend on delivery, which is the pathway a blockade closes.

The comparison also states what it does not establish. No fee schedule is published. Section 8.4 states the cost of Alkaimi's value recognition method as a functional range,

formation and annual maintenance totaling between 14 and 18 percent of recognized value across ten years, and the schedule producing that range is not disclosed in this document.

The terms of the four structures are cited from public filings because they are public. No rate is claimed for Alkaimi's value recognition method. The comparison at Section 8.4 is between stated totals across a stated ten-year window, a functional cost range on one side and a published coupon plus published price indices on the other. A reader who rejects the range can substitute his own figures and rework the arithmetic from the sources named there.

Two more limits are stated.

The advance-rate ranges for reserve-based lending and prepayment rest on an assumption about PV-10 as a share of whole value, stated as a range rather than a figure.

- A reader who substitutes his own share will find the ordering unchanged at any plausible value, because the traditional structures compound their haircuts and Alkaimi's value recognition method does not.
- And the stacks in this run are single holdings at the scale a counterparty brings. Section 9.5 states the relationship between that scale and a national requirement.

8.7 The rules of the pathway comparison.

1. **The offering rule.** A commodity holder is compared against what a commodity holder is offered. Bonds are cited as reference and are not treated as the alternative.
2. **The basis rule.** Each pathway is stated with the base against which it advances. A fraction of PV-10 and a fraction of a recognized whole value are not the same fraction, and the difference is stated rather than absorbed.
3. **The filing rule.** Every term cited for a traditional structure comes from a public filing or a published industry source. Nothing is characterized, estimated or modelled.
4. **The two-question rule.** The comparison turns on how much liquidity the asset produces and what the asset can still do. Rates are stated for the traditional side because they are public, and they are not the argument.
5. **The encumbrance rule.** An encumbered asset cannot answer the next requirement. What is committed for a term is unavailable for that term, and that unavailability is a cost that appears on no term sheet.

6. **The delivery rule.** Every traditional structure is repaid out of delivery. Alkaimi's value recognition method is not, which is why a blockade reaches four pathways and not the fifth.

Sources for this section. Executed credit agreements and annual and interim filings lodged with the United States Securities and Exchange Commission by oil and gas producers and mining companies, cited for borrowing base mechanics, redetermination discretion, mortgage and reservation provisions, commitment fees, prepayment and offtake terms, coverage ratios, and streaming delivery percentages and spot payment terms. Industry guidance from the International Chamber of Commerce Academy and structured trade finance practitioners for borrowing base advance rates, variation margin, collateral management and hedging requirements. Practitioner and accounting guidance on the standardized measure and PV-10.

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9. Case Use Study: Relevance in Today's GCC.

9.1 The situation in numbers.

Operation Epic Fury opened on February 28 2026 with United States and Israeli strikes on Iran. Iran answered with drone and missile strikes across the region and closed the Strait of Hormuz. Within the first 48 hours those strikes reached all six GCC nations. Strikes hit airports, hotels and ports before turning to major oil and gas infrastructure. Desalination plants, power stations, smelters and telecommunications sites were damaged across the region. A memorandum of understanding in June 2026 sought to reopen the strait and end the war. Hostilities resumed in the first week of July and accelerated in the first week of September.

The damage is now measurable.

More than 80 oil and gas facilities were hit across the region. Rystad Energy places restoration of energy infrastructure between 34 and 58 billion dollars, revised upward from an initial 25 billion. Non-hydrocarbon infrastructure adds an estimated 3 to 8 billion. Broader estimates of total repair costs across the GCC run toward 200 billion. Aviation and tourism losses were estimated at 40 billion with all GCC airspace closed simultaneously.

The *International Monetary Fund's April 2026* revisions project a 14.7 percent contraction for Qatar in 2026. Kuwait follows at 4.2 percent and Bahrain at 3.8. The UAE is projected at 1.9 percent and Saudi Arabia at 1.4. The requirement those numbers define is liquidity. Liquidity now, at national scale, durable across a repair measured in years.

9.2 Three pathways impaired at once.

A nation holds three conventional pathways to liquidity and the war has impaired all three simultaneously.

The first is export revenue. The strait closure inverted the exporter model. Prices rose above 110 dollars per barrel at the peaks while producers could not deliver product to market. A supply deficit near 4 million barrels per day between March and May was covered by inventory drawdowns and the largest coordinated release of strategic reserves in history. Only Saudi Arabia and the UAE hold partial overland bypass. Revenue is cut at the exact moment need peaks.

The second is borrowing. Regional issuance was on track toward 1.25 trillion dollars for 2026 before the war and the GCC provides roughly 40 percent of all emerging market dollar issuance outside China. The war premium closed that window.

Yields widened within the first ten days and market depth deteriorated for weaker issuers.

The third is asset sales. Drawing down sovereign wealth holdings means liquidating pooled instruments into stressed markets. Selling the blend when the blend is marked down crystallizes the loss and surrenders the recovery.

9.3 The pathway open and available.

The fourth pathway is the one this document demonstrated. The fourth pathway is open and available to every GCC nation and it awaits their engagement.

Every GCC nation holds under-utilized or non-utilized assets at national scale. The nation engages through the licensed regional network. One specific asset is selected. The unit it is measured in is fixed. The quantity is established and confirmed. The asset is segregated and segmented. The stack segments into instruments and liquidity expresses at that instant in every currency at once.

Three properties answer the three impairments directly. The issuance requires no market window, so the closed debt window is irrelevant to it. It requires no syndicate and no counterparty consent, so it carries no war premium. And it sells nothing, so no pooled holding is liquidated into a stressed market.

One further property belongs to this war specifically. The asset does not transit the strait. A blockade can interdict a tanker. It cannot interdict value in the ground.

9.4 The example. Qatar and Ras Laffan.

Qatar is the sharpest case of the six GCC states. The IMF projects its 2026 contraction at 14.7 percent, the deepest in the GCC. QatarEnergy halted LNG production on March 2 and declared force majeure two days later. LNG holds no overland bypass. Damage at Ras Laffan is estimated at 20 billion dollars with repair projected at two to five years.

Apply the construction from *Section 3.1*. Think of one gas field. Not Qatar's gas endowment and not the entire field. One segregated and segmented portion. One issuance. One insured stack.

Value recognized through Alkaimi does not depend on delivery. Force majeure on LNG shipments does not place force majeure on the nation's liquidity.

9.5 The scale, stated honestly.

The verification run uses single holdings at the scale a counterparty brings. 75 metric tons of gold. Fifty-one million barrels of crude. 20 million metric tons of iron ore. Those are holdings rather than national asset bases, and the run was built that way so that every quantity in it is one a real party could produce.

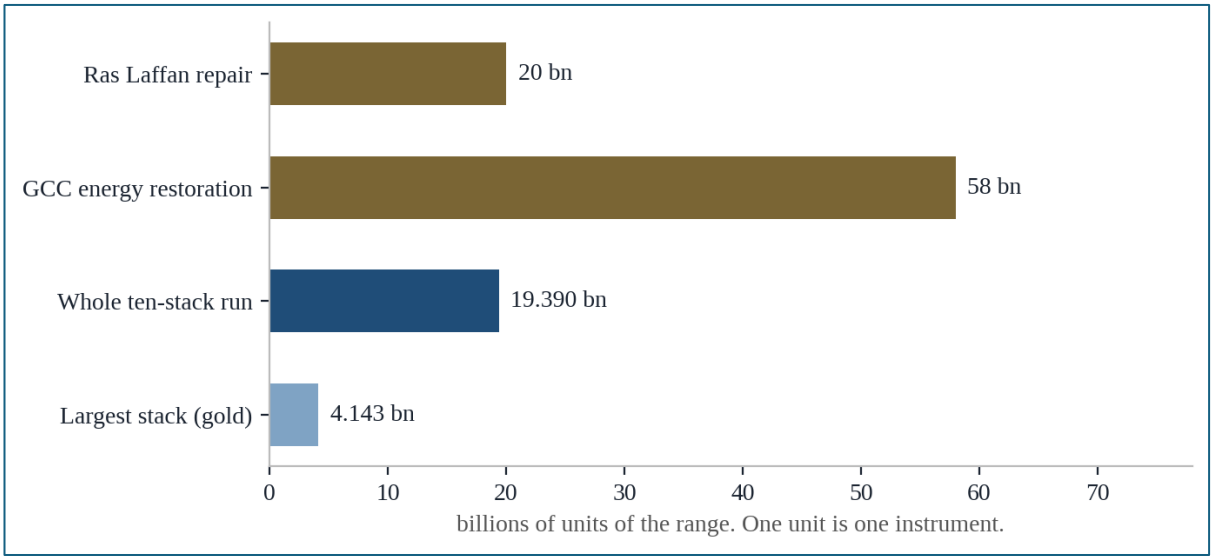

Figure 9.1. The regional requirement against the verification run. One unit of the range is one instrument.

The GCC energy restoration ceiling of 58 billion is three times the entire ten-stack run. The Ras Laffan requirement of 20 billion is close to the whole run and nearly five times the gold stack, which is the largest of the ten.

Read the comparison the other way. The run is ten holdings. 75 metric tons of gold. Fifty-one million barrels of crude. A national gas asset is not a holding and does not sit in that range at all. Fifty-eight billion is a large number set against a test built from holdings and a small one set against what a nation already owns.

And the mechanism does not change with size. The recognized value is fixed at creation whether the recognition is four billion units or fifty-eight. The unit does not know the difference and neither does the ledger.

Liquidity here is not rationed against a lender's appetite or a market's window. It is released at recognition, against the asset, at the scale the asset carries.

9.6 The two cases.

Case one. The general GCC case. A GCC nation requires 58 billion dollars equivalent, the ceiling of the Rystad restoration estimate. It selects one asset of sufficient scale and engages the licensed network. The stack combines into 58,000,000,000 instruments, each carrying the identical quantity of universal value units.

The repair is multi-year and multi-currency procurement. Engineering, construction, equipment and materials are contracted across dollars, euros and regional currencies. Each contract is paid at an instant of the nation’s choosing from recognized value as shown at Section 9.5.

Case two. Qatar and Ras Laffan. The need is 20 billion for Ras Laffan across a two-to-five-year horizon. Qatar stacks one segregated gas asset recognized at that level. The 20 billion is available against contracts immediately, without a bond syndicate, without a roadshow and without a war premium.

What the holding period costs, in the currency case.

A repair program does not spend its liquidity on the day it raises it. It holds working balances across the whole term and draws them down against contracts as the work proceeds.

This document measures what that holding costs. Across a window of 1,458 days, close to the four-year midpoint of the Ras Laffan estimate, a dollar balance lost 11.27 percent of its purchasing power and a euro balance 11.86 percent. Across 1,953 days, the outer end of the five-year projection, a dollar balance lost 20.68 percent.

> A nation raising 20 billion in currency and holding it across a five-year repair spends the last of it with roughly a fifth less purchasing power than the first of it. No fee is charged for that and it appears in no account. A nation holding the same value in grains spends the last of it with the count it started with.

The two-to-five-year repair horizon is the durability case this document was built to demonstrate.

Ten stacks held locked value through windows of *149 to 1,953* days, containing a ruble that ran from *56.56 to 101.04* per dollar and a European gas market entered at its height. A Qatari repair window sits inside that demonstrated range, which contains one of the worst currency dislocations of the modern record.

Each contract is paid at an instant of the nation's choosing from recognized value, as *Section 9.8* shows.

9.7 The closure.

Section 4.19 stated that value under this system is continuous, that it does not close when debt markets close and that its functional costs do not rise when risk premiums widen. In March 2026 the GCC watched its debt window close and its risk premiums widen. That sentence stopped being an abstraction and became the region's operating condition.

What the GCC requires now is liquidity that arrives with functionality intact and endures with durability across the repair. That is not a description of any borrowing program.

The assets are already in the ground and already owned. The verification run is the evidence that the lock holds through exactly this kind of period, and the positional data is the evidence of what the alternative costs while it does. Alkaimi's value recognition method makes that liquidity available, as Section 9.3 states.

9.8 Case Example: GCC - what DTA settlement does.

Section 9.1 states what the region needs in its reference month. Liquidity now, at national scale, durable across a repair measured in years. What follows is the same requirement one step later, when a nation holding that liquidity begins to spend it.

A repair program is procurement. A prime contractor for engineering, procurement and construction, subcontractors beneath him, equipment vendors and materials suppliers, each paid against milestones across a horizon of years. The holdings on the other side of those payments arrived by their own routes, against their own assets, on their own entry currencies. None of that enters what passes between them. The program generates three payment shapes, and all three are recorded at Section 5.

The milestone payment, against no sale.

Movement one moves 1,000,000,000 instruments between the gold holding and the iron ore holding. Two asset classes with nothing in common, created 1,804 days apart, and no rate is applied because every instrument carries the same grain count. A ministry paying a contractor's holding pays on that shape. What that contractor's stack holds, and when it was created, play no part in the payment.

The payment against material delivered.

Movement two discharges a real sale. 100,000 metric tons of wheat is sold, and the payment is 24,141,387 instruments out of one holding and into the other at the joint instant. Turbines, compressors, cable and pipe arrive on that shape.

The payment carried onward.

Movement three is the shape on which a program with subcontractors runs. The wheat holder is paid 24,141,387 instruments, buys nothing, and pays 23,863,620 of them onward for copper, retaining 277,767. A prime contractor pays his subcontractor out of the count the ministry paid him, having bought nothing between the two payments.

What both sides read.

Every payment above is recorded at the instant it occurs and audited on both sides. The ministry's auditors and the contractor's auditors read one figure at one instant, and what they compare is arrival against departure rather than two books reconciled

at the end of a period. For a program answerable to a national audit bureau, that is the whole of the accounting. The value either arrived or it did not.

A ministry paying 20 counterparties is therefore running one accounting and not 20. The entry currency of each holding is a fact about how that holder arrived, and it is not a term in what he is paid.

That is what DTA settlement does for a program of this size. Every payment in it is a whole value held in units on both sides at the instant it occurs, and the value that arrives at one link is the value that leaves at the next.

The GCC case, and the figure a ministry cannot obtain.

Section 9.1 states the region's requirement and the paragraphs above state what its procurement looks like under DTA settlement. Set the two against *Table 9.1* and one figure is available to a finance ministry while the other is not.

The available one. The five transaction costs of the currency pathway, conversion, rails, float, hedge and capital, stand at zero on each movement, and *Table 5.2* records the difference at zero on both sides of each.

Both are arrived at by counting. Neither changes with the number of links, because each link carries the same zero, so a program of three payments and a program of three thousand carry the same figure.

The unavailable one. The same program settled the other way has no figure at all. Not a large figure and not a disputed one. Four of the five costs carry no target and therefore no indicator, and the fifth is monitored as delivery speed rather than as money. The ministry is asking for a number that was never built.

Cost	Target set for wholesale	Indicator published
Conversion	None	None
Rails	None	None
Float	Speed rather than cost. 75 percent inside one hour	35.4 percent at the 2025 measurement
Hedge	None	None
Capital	None	None

Cost	Target set for wholesale	Indicator published
Price level	Not in the framework	Monthly, by national statistical authorities, on a fixed base

Table 9.1. The five transaction costs and the price level, against whether the international monitoring framework sets a target and publishes an indicator. One row of six carries a figure, and it is measured as speed.

Read it as a procurement officer reads it. Steel, turbines and construction can be tendered because each carries a published price. Settlement cannot be tendered against a figure that does not exist, and the one row carrying a figure reports a delivery rate.

The comparison in the GCC case is therefore not cheaper against dearer. It is countable against unstatable.

9.9 The GCC requirement, pathway by pathway.

Section 9.1 states what the region needs in its reference month. Liquidity now, at national scale, durable across a repair measured in years, with all three conventional pathways impaired at once.

Set the four commodity structures against that requirement rather than against each other.

Requirement	Reserve-based lending	Prepayment or streaming	Alkaimi's value recognition method
Liquidity now	Redetermination cycle, engineering report, syndicate	Negotiated per transaction with a single counterparty	No market window and no counterparty consent
At national scale	Capped by a discounted base the lender sets	Capped by coverage on a cut forward curve	Sized on the asset
Durable across years	Redetermined semiannually, deficiency curable in 30 to 90 days	Fixed term with all output committed	The recognized value does not move; the run proves it across 1,953 days

Requirement	Reserve-based lending	Prepayment or streaming	Alkaimi's value recognition method
Asset still usable	Mortgaged at 85 percent, remainder reserved	Output sold forward or streamed for 40 years	Not sold and not pledged
Priced in a war premium	Base cut on a conservative price deck	Counterparty prices the risk directly	Functional costs do not rise when risk premiums widen
Available for the next requirement	Already drawn against the same properties	Output already committed for the term	Unencumbered, so the same asset can be recognized against again

Table 9.2. The regional requirement against the pathways actually available to a commodity holder.

The requirement that has already moved once.

A repair measured in years is not one requirement. It is a sequence of them. *Section 9.1* records the energy restoration estimate revised upward from its initial level, and hostilities resumed in the first week of July, so the requirement stands open rather than fixed.

Table 8.2 sets out what each pathway takes. Four of the five commit the asset for a term, so an asset financed against the first figure is not available when the next one arrives. The nation meets the larger requirement with whatever it has not already committed.

Alkaimi's value recognition method commits nothing. The asset is neither sold nor pledged, so a further portion of the same holding can be segregated and recognized when the next figure arrives. What was recognized first stays owned and insured throughout.

So, the pathway taken at the first figure decides what is available at the second.

The strait, and the one property that belongs to this war.

Every structure above depends on delivery. Reserve-based lending is repaid from production revenue. Prepayment is repaid in barrels. Streaming is repaid in ounces. A borrowing base is secured on goods that must move.

A blockade interdicts delivery. It therefore reaches all four at once, and it reaches them precisely when the liquidity is needed.

> Alkaimi's value recognition method does not require delivery. The asset does not transit the strait, and value in the ground cannot be interdicted. That is not an advantage of degree over the four structures in *Table 9.2*. It is the difference between a pathway that functions in the reference month and four that do not.

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10. Rights, Protection and Status.

10.1 What this section does.

The preceding nine sections state a verification, an evaluation and an application. This section states what is protected in them, what is not disclosed, what may be reproduced, and what status the scenarios of *Section 9* carry.

This section is placed here rather than at the front because it governs the material above it. A reader who has reached this point has read a record of operations performed by a mechanism, and the terms on which that record is published are the subject of what follows.

10.2 The operations described, and the boundary around them.

This document describes operations performed by the Alkaimi Financial Ecosystem under all aspects of grain theory and its patented digitization and tokenization technologies: the recognition of value in an asset, the creation of a stack against it, the segmentation of that stack into a series of uniquely issued instruments, the digitization and tokenization of those instruments, the underwriting embedded inside the creation event, the settlement of movements between holdings, and the truing operation by which the ledger squares at every instant.

Each of those is described here at the level required to make the verification results intelligible and verifiable to a reader. None is described at the level required to perform it.

That boundary is deliberate and it is drawn in the same place throughout. What an operation does is stated. How it is performed is not. A reader can therefore test every result in this document against the data cited, and can do so without being placed in possession of the method that produced it. Any product, instrument or capability contemplated from this document is contemplated under Alkaimi license and under the patents, technologies and trade secrets identified in this section and at Section 10.9.

10.3 The measure, and what is not disclosed.

This document states the measure on which those operations depend: the value grain, the Universal Value Unit in which recognized value is held, the Universal Value Adjustment that balances the ledger, and the reference against which all three are positioned. The reference is stated so that the measure can be understood to rest on something other than a sovereign currency.

The derivation of the unit from that reference, the instant and observation set at which it was fixed, and the procedure by which any asset is assembled into universal value units are not disclosed in this document and are maintained as trade secrets.

Those operations and that measure are proprietary. They are described here at the level required to make the verification results intelligible and verifiable. They are not described at the level required to implement them, and the methods, sequences, and procedures by which they are performed are not disclosed in this document.

The description of an operation in a verification record confers no right to perform it. The statement of a reference confers no right to the measure built on it. The absence of a method from this document is not evidence that the method is unprotected. It is evidence that it is protected by means other than publication.

10.4 Trademarks.

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10.7 Status of the scenarios.

Section 9 sets out pathways available to sovereign parties under the mechanism this document verifies. Those scenarios are illustrative applications of a demonstrated capability. They are not offers, commitments, or projections, and no term of any engagement is stated or implied by them. Approach is limited to Alkaimi licensed providers and Alkaimi regional representatives. No other pathway exists.

10.8 Enforcement.

The patent portfolio set out at *Section 10.9* is held under a dedicated enforcement mandate, resourced and standing, whose function is the identification and pursuit of unauthorized use. Licensees have paid for their rights. That consideration establishes the measure of what unlicensed use takes, and it is the measure that will be applied.

That mandate is executed by *Digital Security Enforcement Ventures (DSEV),* formed by *Pegisai Global* in May 2023 as an operationally independent, United States based law firm. DSEV enforces the intellectual property portfolio, each licensee's right to operate Alkaimi's technologies, and each licensee's protected business operations, globally.

The right DSEV enforces is conferred by treaty and by statute.

- TRIPS Article 28 confers the exclusive right to prevent any third party from making, using, selling or importing the invention.
- TRIPS Articles 41 through 61 oblige every WTO member, including the United States and all six GCC states, to provide injunctions, damages and criminal procedures for infringement.
- The Paris Convention provides national treatment and the right of priority.
- The Patent Cooperation Treaty governs international filing, and all six GCC states are contracting states.
- The GCC Patent Regulation of 1992 established the GCC Patent Office in Riyadh, whose grants are enforced by each state's national office.
- In the United States, 35 U.S.C. §§ 154, 271 and 283 through 285 confer the right to exclude and provide injunctions, damages and attorney fees.

10.9 Intellectual property held.

The instrument, the platform, the operations by which value is recognized and instruments are created, and the measure on which those operations depend are protected by a portfolio of patents held within the group. It is a portfolio rather than a single filing. Foundational priority extends to April 1997, and protection on the

foundational filings was confirmed by the United States Patent and Trademark Office in 2019.

The technologies on which the Ecosystem operates have been continuously developed therefrom. Each generation of that development is directed at subject matter of its own and is held under its own filings, whose terms run from their own dates under *35 U.S.C. 154(a)(2)*. Protection is therefore renewed across the portfolio rather than measured from any single point in it.

The portfolio is supported by trade secrets, by the license terms binding every provider within the Ecosystem, and by copyright in the published expression of the work.

Nothing in this document identifies which filing covers which operation, and no statement in it should be read as doing so. The portfolio is not enumerated here and the absence of an enumeration is not a limitation on it.

10.10 Forward-looking statements.

Section 9 sets out scenarios drawn from published damage assessments and published economic projections issued by third parties. Those scenarios describe pathways available under a demonstrated mechanism. They are not forecasts, commitments or undertakings, and no outcome described in them is promised or implied.

Statements in this document that relate to future events, future performance, future deployment or future conditions are forward-looking by nature. They rest on information available at the reference instant and on assumptions stated where they are made. Actual outcomes may differ, and no party undertakes to update any such statement.

10.11 No offer and no solicitation.

This document is a record of a verification run. It is not an offer to sell, a solicitation of an offer to buy, an invitation to subscribe, or a recommendation in respect of any instrument, security, holding or arrangement, in any jurisdiction.

Nothing in it constitutes financial, investment, legal, tax or accounting advice. The Digitized Tangible Asset is an institutional settlement instrument available only to licensed financial institutions within the Alkaimi Financial Ecosystem. Nothing described here is offered to the public and no public participation is invited.

10.12 No reliance.

This document is published for information. It is not prepared for the circumstances of any particular reader and it takes no account of any reader’s objectives, position or requirements.

No representation or warranty, express or implied, is given as to the accuracy, completeness or fitness for any purpose of the information in it. No liability is accepted for any loss arising from reliance on it. A reader who acts on anything in this document does so on his own assessment and at his own risk.

10.13 Third-party data.

This document rests in part on data published by third parties, including the *European Central Bank, the Central Bank of Russia, the International Monetary Fund, the Bank for International Settlements, the Financial Stability Board, the United States Bureau of Labor Statistics, Eurostat, and the Trade Policy and Strategy Office of the Ministry of Commerce of Thailand,* together with public regulatory filings and published industry sources.

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10.15 Legal status of the Digitized Tangible Asset, and the law of the ledger.

The *Digitized Tangible Asset is* property and not investment property. In the United States the DTA holds the status of a bearer instrument under *Article 8 of the Uniform Commercial Code.* Bearer paper was legislated out of new issuance in the United States in 1982 for being anonymous, never for being bearer; the body of bearer law is intact, and every holder on the Alkaimi ledger is known to the ledger at every instant, which is what separates the bearer function from anonymity.

A regulator sees the DTA as the licensee has posted it in its books. Alkaimi makes a posting recommendation for each DTA stack from that stack's underwriting, in accordance with the Basel rules, and a DTA held by a licensee is posted on that recommendation. *The Basel Committee's cryptoasset standard* does not reach the DTA: the standard covers private digital assets that depend on cryptography and distributed ledger or similar technologies, and it

excludes dematerialized securities kept on centrally administered electronic registers. Alkaimi uses no blockchain and no similar technology, and Pegisai Global Holdings administers the ledger centrally.

The DTA is not a virtual asset under the *Financial Action Task Force* definition, and no licensee is a virtual asset service provider. The definition requires a digital representation of value that can be traded or transferred and used for payment or investment. The DTA is not a representation of value held elsewhere, the DTA cannot be traded, and the DTA is used as a payment and settlement item inside the banking space, under the financial institution regime, by licensed banks that are already covered under that regime.

The law of the ledger is the law named in the Alkaimi account agreement between the account holder and Pegisai Global Holdings as intermediary, and that law is distinct from the law governing this document, which is stated at the front. Across borders three private international law instruments give the account agreement's choice effect. *The Hague Securities Convention,* in force since 1 April 2017, gives effect to the law expressly agreed in an account agreement where the intermediary keeps a qualifying office in the chosen jurisdiction, and Pegisai Global Holdings keeps one. *The UNCITRAL Model Law on Electronic Transferable Records*, adopted in 2017, gives transferable instruments legal effect in electronic form; Bahrain enacted it in 2018, Singapore and the Abu Dhabi Global Market in 2021, the United Kingdom in 2023, France in 2024 and China in 2025. *The UNIDROIT Principles on Digital Assets and Private Law,* adopted in May 2023, provide that the system on which a digital asset is recorded may name the governing law and that control of the asset perfects a security right in it, and only the Alkaimi ledger changes control of a DTA.

A sanction attaches to a person or an entity. Every holder on the ledger is known, so a lawful sanction on a holder is honored by the licensee against that holder under the licensee's own regulator. A rule that attaches to a currency travels through that currency, and settlement on the ledger carries none, so no currency-attached rule is a term of any settlement between two holders. Nothing in this construction removes an obligation from any party.

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THE UNDENIABLE RESULTS

11. What the record establishes.

11.1 The verifications and the comparison, read together.

The two verification runs and the comparison each state their own result at their own close. None of them states what the three establish together, and that is what this section does.

- The first verification held ten stacks across five and a half years and found that the recognized value does not move.
- The second verification moved value between holdings and found that arrival equals departure at zero on both sides.
- The comparison at *Section 8* set the alternative beside the record.

Liquidity created at recognition exceeds what any traditional pathway advances, and its cost is stated in the open. The costs of the currency pathway are not: four of the five are published nowhere, Table 9.1 shows no target set and no indicator published for them, and the one cost that is published everywhere is not counted as a cost at all.

11.2 What is revolutionary.

Every prior attempt to close that gap worked inside the same assumption, which is that the unit of account must be something people want.

Pegs, baskets and hedges are all the same move. Each builds an approximation of a fixed reference out of parts that move, and each fails in the same way, because an approximation assembled from moving parts moves.

Granular value does not approximate a fixed reference. It is one. The measure holds still by having nothing that pushes on it, and once it exists three things follow that no amount of engineering inside the old assumption could produce.

A hedge has no subject. A hedge is a bet placed against a bet, and it exists because the underlying number is uncertain. Ledger the value and there is nothing against which to place it.

A spread has nothing to arbitrage. Two quantities of the same thing are the same quantity, whatever produced them.

And the speculation stops. The Alkaimi system does not speculate on assets. The barrel, the acre and the ounce do not move. What moves is the bet on what they are worth, and that bet is the number everyone reports as value. A fixed measure removes the thing on which the bet is placed.

Sections 4.5 through 4.14 are ten independent demonstrations of a fixed measure. Ten asset classes, five currencies, five and a half years, through the largest dislocations of the decade. In every one of them the count stood at the reference instant exactly where it stood at creation.

That is what makes the three consequences above real rather than argued. The hedge, the spread and the speculation do not disappear because the measure is described as fixed.

The hedge, the spread and the speculation disappear because the measure was fixed, and stayed fixed, while the currencies around that measure moved by as much as fifty-six points inside a single window.

11.3 The existing order and this one, compared.

Nine axes.

Each is established elsewhere in this document rather than asserted in this one.

	The existing order	Under the Alkaimi system
The unit	A currency issued by a state, which floats and debases. Every measurement taken with it inherits its movement.	Recognized value, fixed at creation and recognized rather than priced. Nothing pushes on it.
Who sets it	The issuer sets the unit, the rate that decides what any price can be, the index reporting whether you won, and the instruments insuring the loss.	The value comes from the asset. Recognition sizes against what is there.
What settlement means	A liability moves from one book to another. The obligation is reassigned and the receiver holds a claim on a different party.	The obligation is extinguished. Nothing remains on either book. Section 5 audits three of them at zero.
What holding costs	Purchasing power, continuously, in proportion to duration. 48 of 50 positions in this run are losses.	No purchasing power. The count held at creation is the count held at the close, in all ten windows.
What liquidity costs	A coupon for the life of the instrument and the principal	Formation once at creation, then a stated annual maintenance fee. Nothing is owed at the end, and

	back, or the asset sold and the recovery surrendered with it.	the asset is not sold and not pledged.
How much the asset produces	0.27 to 0.60 of whole value, sized against a discounted derivative that its own users decline to call a value.	0.80 of the recognized count, sized against the asset.
Where rules attach	To the currency, and they travel wherever it travels.	Nowhere. A settlement carrying no currency offers a currency-attached rule no currency through which to travel
Who can participate	Holders of assets a lender can price. What cannot be priced cannot be financed.	Holders of anything with value. Value resolves to a count, and counts are comparable however un-identical their sources.
Who can create liquidity	Banks, by lending deposits into existence. The holder of the asset waits on a lender's consent.	Any holder of recognized value. Recognition creates the liquidity, and it qualifies at the standard central bank instruments meet.

Table 11.1. The nine axes. Each are established elsewhere in this document and are not argued here; the participation axis is stated here for the first time.

The participation row of Table 11.1, who can participate, is the one axis this document states here rather that earlier, and it covers more assets than the other eight rows together.

A unit that moves requires someone to set it, makes settlement a transfer of claims rather than an ending, costs the holder while he holds, prices liquidity as a loan, sizes advances against a discount, gives a rule something to attach to, excludes everything it cannot price, and leaves the creation of liquidity on a lender's book

The participation row of Table 11.1, who can participate, is the one this document has not claimed elsewhere, and it covers more assets than the other eight rows together.

The existing fractional system cannot monetize most of the world's assets, and the reason is not credit judgment. A field, a deposit, a harvest and a warehouse position share no common measure, so a lender falls back on what he can price and declines what he cannot. The absence of a common measure is a measurement failure, and it is why the unbankable are unbankable.

11.4 What a holder can do.

Stated as capability rather than as merit.

1. Create liquidity against an asset without selling it, pledging it or encumbering it, and still own it at the end.
2. Hold that liquidity across a window of years without it losing what it buys.
3. Spend it in any currency, at an instant of his own choosing, without a market window, a syndicate or a counterparty's consent.
4. Bring the same asset forward again, because nothing was committed for a term.
5. Settle with a party in another jurisdiction, on another currency, without either of them needing a third currency in which to meet.

No item in the list above requires anyone's permission, and no item in it runs through a channel another state controls.

11.5 Alkaimi's 100% Whole reserve model

Alkaimi's model is 100% Whole Reserve banking, and this record verifies the model in operation. 100% Whole Reserve holds what full reserve banking held only in name: full reserve held reserves equal to the claims against the institution, in metal or in central bank money, while 100% Whole Reserve holds the value itself, whole, held in universal value units, in its own DTA stack. Alkaimi's processes and technologies then do what full reserve banking never could: they create liquidity, by recognizing more assets onto the ledger rather than by lending the same asset more than once, and the newly recognized value settles as a monetary mechanism. That closes the one defect of full reserve banking, that it could not create liquidity, and it removes the two defects of fractional reserve banking, that it debases the currency and that its solvency fails on the day depositors come. Alkaimi's DTA is a settlement instrument, not an investment mechanism and not a speculative item.

Section 7 carries the history and the correction. *The Bank of Amsterdam* held coin and bullion against every deposit, could not create liquidity, and failed when its operators broke the full reserve rule in secret. Every restoration since failed on the liquidity wall. Alkaimi's operating matrix restores the whole-reserve model and corrects that weakness. Liquidity is created by recognizing more assets onto the ledger through the DTA creation process, never by lending the same asset more than once. The reserve behind an Alkaimi licensee is recognized value held whole in its own DTA stack, held in universal value units, and the ledger grows without leverage.

The liquidity created is not a claim on a bank. A licensee posts the DTA it holds as Level 1 High-Quality Liquid Assets with no applied discount, on Alkaimi's recommendation for each DTA stack from that stack's underwriting, and the licensee's regulator sees the DTA as posted; and in the second quarter of 2022 the DTA met the Bank for International Settlements absolute payment standard: settlement final, irrevocable and unconditional.

Every Alkaimi licensed financial institution meets Basel III+ compliance standards from its first DTA engagement date: the output floor at 72.5 percent of the standardized calculation, operational risk capitalized on the standardized approach and the trading book under the Fundamental Review of the Trading Book; and it meets the Basel III standards those complete, liquidity coverage across a 30-day stress window and stable funding across one year. JPMorgan Chase, Bank of America, Citigroup, Wells Fargo, Goldman Sachs and Morgan Stanley operate under none of it. The United States has implemented no element of Basel III+, and the six remain under their own capitalization formulas set more than thirteen years ago. Section 7 dates that record.

The superiority is not a rating. It is the operating model. An Alkaimi licensee cannot lend the ledgered reserve, because segregation and segmentation place every holding in its own DTA stack and nothing crosses between stacks. It holds no maturity mismatch, because it earns fees on recognition, custody and settlement rather than a spread on lending. Its reserve does not erode, because the count is held in grains and the count does not move. A bank built this way does not meet the standard by effort. It meets it by construction.

The ledger side completes the statement. The value on the ledger is whole: every value entered at recognition, nothing marked against a comparable, nothing resting on a price that credit availability set. The system's capability is stated as a range, because a single number in a debased unit is not defensible by construction. The top line is 4 quadrillion United States dollars of assets viable for use: assets for which a market exists, demand will exist, and value must be created to transact. The bottom line applies the dollar's own published debasement, 97 percent of purchasing power lost since 1913 on the official measure, so the 4 quadrillion nominal contains 120 trillion of purchasing-power content. One quantity, two units. A reader who holds the top line inflated by 97 percent lands at the bottom line, which this document states first.

And the reach is the part the existing order cannot answer. Fractional banking works only with what it can price against a currency and mark against a comparable. Alkaimi's value recognition method brings assets in at whole value that the fractional system cannot touch at all, and Section 11.3 states who that admits: holders of value

who were never bankable, with assets that were never priceable, entering at whole value with no history required.

11.6 Free and fair trade, and what interferes with it.

Free and fair trade, as this document uses the term, means that two parties who agree an exchange can complete it. The term is mechanical. It carries no position on tariffs, quotas or trade policy.

What interferes with it is not disagreement about price.

What interferes is a third party, not in the transaction, being able to prevent it, and the mechanism that makes prevention possible is control of the channel through which the transaction settles.

The distinction that matters.

a. A measure applied as leverage in a negotiation is one thing. It is bounded, it is aimed at a party who can respond to it, and it can be withdrawn.

b. Economic strangulation is another. It removes the capacity to trade at all, it reaches parties who are not at the table, and once the channel is closed there is no position from which to negotiate its reopening.

Leverage and embargo are separated by whether the instrument remains under the control of the party who applied it. The separation is not a moral distinction. The separation is mechanical, and the historical record shows how quickly it fails.

The documented case.

On 26 July 1941, the President of the United States, Franklin Delano Roosevelt, froze all Japanese assets in the United States. Britain and the Dutch East Indies followed. Japan lost access to three quarters of its overseas trade and 88 percent of its imported oil.

The freeze reached beyond American territory because many international transactions of the period were settled through United States banks. The channel was the settlement channel, and control of it reached transactions to which the United States was not a party.

It was designed as leverage. A licensing system was to allow limited purchases and preserve room to bargain.

> In practice the licensing authority was administered so strictly that no license was ever issued, and by August the cut-off was complete.

What was built as a lever became a total embargo through its own administration.

Japan then held two options: withdraw from positions it had taken, or seize the resources to which it had lost access. In December it attacked Pearl Harbor.

This document does not argue that the embargo caused the war.

Japan had been at war in China since 1937 and had signed the Tripartite Pact, and the measure was a response to that conduct.

What the record shows is narrower and harder to dispute.

An instrument applied through control of a settlement channel produced an outcome its author did not choose, could not confine, and could not recall.

The same mechanism, 70 years later.

In 1941 the channel was settlement through American banks.

Today it is dollar clearing, and the Bank for International Settlements records the width of it: the dollar stands on one side of 89.2 percent of global foreign exchange turnover, and it carries 54 percent of export invoicing.

A settlement carrying no currency has no such channel.

That is the whole of the claim. It is a statement about where a rule attaches, not about whether any rule is justified, and nothing in this construction removes an obligation from any party.

> *External data used in this subsection. Executive Order 8832 of 26 July 1941 and the contemporaneous export licensing record, as set out in the historical literature on the 1941 asset freeze and oil embargo. Bank for International Settlements, Triennial Central Bank Survey, April 2025, for the dollar's share of turnover and invoicing.*

11.7 Summation.

Review.

The preceding information illustrated the effectiveness of the Alkaimi financial ecosystem's capabilities, structure and objectives.

Every statement that follows is supported and none of these facts are argued here.

Grain value works.

Ten assets were recognized, stacked, combined and held. *Table 4.1* names all ten with their quantities, units, entry currencies and creation dates. *Figure 4.1* shows the run at 19,390,054,794 instruments. *Sections 4.5 through 4.14* carry each stack against its own window, with a chart and a position table for every-one. *Table 4.12* orders all fifty positions from worst to best. *Figure 4.12* plots each of the fifty against the length of

the holding. *Table 4.13* carries the published index behind every purchasing power figure in the document.

Grain settlement works.

Value moved between real holdings three times. *Section 5.4* transfers value between two commodities with nothing in common, created 1,804 days apart. *Section 5.5* discharges a sale and leaves nothing on either book. *Section 5.6* carries the same value onward to a third party. *Figure 5.1* shows the chain. *Table 5.2* audits departure against arrival on both sides of all three and returns zero in every cell. *Section 5.9* states the eight rules the movements obeyed. *Section 9.8* runs the whole shape against a national procurement program.

Value was held through the worst currency conditions in modern history.

No aspect of the evidentiary materials ran during a quiet period. As the following proves:

a. *Figures 4.2 through 4.11* plot five currencies across every window in the run.
b. *Figure 4.14* gives the spread between the widest and narrowest currency in each of the ten.
c. *Section 4.4* records the ruble running from 56.56 to 101.04 per dollar across the ten creations.
d. *Section 4.8* enters the European gas market at its height and produces the widest band in the document.
e. *Section 4.16* states what 48 of the 50 holders lost while the recognized value moved 0.00 in all ten windows.

Alkaimi's operational infrastructure and capabilities.

a. *Section 3.1* states the operating platform: a walled garden core interconnecting a regionally diverse network of licensed bank holding companies, capped in number, with issuance occurring only through that network and the issuance process regulated.

b. *Section 6* states what movement between licensees is, which is a ledger entry with no correspondent chain, no intermediary standing along a route and no float held between departure and arrival.

c. *Section 10.11* states who may hold the instrument.

d. *Section 9.3* states how a nation reaches it.

Alkaimi's data points are reproducible.

Every figure cited above is published, sourced at the point of use, and reproducible from the data identified in *Section 4.4*. The record was built to be checked rather than believed.

A Condensed Review:

The Alkaimi ecosystem recognizes value in assets the existing order cannot measure, and the *Alkaimi ecosystem* moves that value on a rail that carries no currency. Recognition establishes the whole value and assembles it into universal value units. The rail carries it between holders without either side converting, hedging, or clearing through a channel that belongs to a third party. And whole reserve banking stands restored, with liquidity created at value recognition and qualified at the same standards central bank instruments meet.

Neither *Alkaimi's value recognition method* nor the neutral rail is a proposal. *Sections 4.5 through 4.14* hold the count across ten windows. *Section 5* moves the recognized value between the holders.

What Alkaimi works to achieve.

The assets carrying the world's real wealth sit largely outside the monetary system. Not because they lack value, but because no common measure existed to bring them into the monetary system. Bringing them in is the work.

Bringing those assets in is deliberately slow. Value entering faster than an economy can absorb it does its damage to the people the system exists to relieve.

The direction is that a nation, a producer or a holder can carry wealth in what it owns rather than in a claim on someone else, and can put that wealth to work without surrendering it.

Alkaimi's drive to provide economic sovereignty and equality in trade.

Free and fair trade, as defined in *section 11.6*. Two parties who agree an exchange can complete it, and no party outside the transaction can prevent it.

The support of free and fair trade is a mechanical objective rather than a political one. Trade is not achieved by argument, and it should not require the consent of parties who are not in it.

The existing order became unequal because the measure moved and because control of the settlement channel sat with parties who were not in the transaction. *Section 4.16* records what the first cost holders: 48 losing positions out of 50. *Section 11.6* records what the second has cost, at least once, on a scale that reached far beyond the parties to it.

Alkaimi exists to remove inequality and settlement channel control by using a measure that does not move, and a rail on which no currency is a term and in which no outside party is a party.

What Alkaimi restores

Neutrality in the measure, so a holding is worth what it was worth when it was recognized.

Neutrality in the rail, so a transaction between two willing parties completes because they agreed it.

Access for the holder of any asset with value, whether or not a lender can price it.

Each of those rests on what is measured in this document rather than on what is asserted in this section, and each is what a fixed measure and a neutral rail produce once they exist.

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