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TOKENIZED REAL ESTATE FOR UKRAINE: MARKET DATA, PILOT ECONOMICS, AND OPERATING DESIGN

ТОКЕНІЗОВАНА НЕРУХОМІСТЬ ДЛЯ УКРАЇНИ: РИНКОВІ ДАНІ, ЕКОНОМІКА ПІЛОТНОГО ВИПУСКУ ТА ОПЕРАЦІЙНИЙ ДИЗАЙН

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The article assesses tokenized real estate as a financing instrument for Ukraine's reconstruction. Drawing on current rules and market data from the EU, the US, Dubai, UAE, and South Korea, it models pilot-issue economics, operator profit and loss, and break-even AUM. The empirical anchors are ESMA's classification of crypto-assets, the RWA.xyz live monitor, French AMF and US SEC filings, and Ukrainian legal limits under Law No. 2074-IX and draft bill No. 10225-d. The article recommends an SPV-linked security with bank settlement, full KYC, completed income-producing property, and scheduled exit windows. The minimum efficient issue is near US\$3 million. Break-even AUM lies in the US\$50-110 million band. The target buyer pool is 200-300 investors with an average ticket of US\$10,000-15,000. The article sets out a business-process circuit usable by Ukraine-linked issuers under current law.

Keywords: tokenized real estate; securities; SPV; Ukraine reconstruction; digital financial instruments; pilot issue; break-even AUM; ESMA.

Стаття присвячена оцінці економічної доцільності та операційного дизайну випуску токенизованої нерухомості як інструмента залучення капіталу для повоєнного відновлення України. Актуальність теми зумовлена потребою у диверсифікації джерел фінансування реконструкції в умовах обмежених бюджетних можливостей, високої облікової ставки Національного банку України та незавершеного правового режиму віртуальних активів. Метою дослідження є розробка обґрунтованої моделі пілотного інструментів, прив'язаних до об'єкта нерухомості через спеціальну юридичну особу, з урахуванням чинного українського законодавства та найкращих міжнародних практик. Методологія дослідження ґрунтується на порівняльно-правовому аналізі регуляторних режимів країн ЄС, США, ОАЕ та Південної Кореї, а також на емпіричних кількісних розрахунках, побудованих на офіційних даних Європейського управління з цінних паперів та фінансових ринків, моніторингу RWA.xyz, дослідженні Управління фінансових ринків Франції, регуляторних документах Комісії з фінансових послуг Республіки Корея, а також формах емітентів у Комісії з цінних паперів та бірж США. Окремий блок аналізу спирається на доповідь Світового банку RDNA4 щодо потреб у відновленні України та чинні рішення Національного банку України. Основні результати охоплюють три кількісні висновки. Перший: мінімальний ефективний обсяг першого випуску складає близько 3 мільйонів доларів США, нижче цього порогу витрати на обслуговування поглинають надмірну частку валової виручки. Другий: ефективна точка беззбитковості активів під управлінням лежить у діапазоні 50-110 мільйонів доларів США залежно від параметрів витрат.



Третій: цільовий пул інвесторів першої фази формується із професійних інвесторів із середнім внеском від 10 до 15 тисяч доларів США, оскільки масовий роздрібний сегмент не покриває потреби в одиничному випуску цього масштабу. Практична цінність роботи полягає у формуванні бізнес-моделі та операційного циклу з восьми контрольних точок, який може бути застосований емітентом.

Ключові слова: інвестування в будівельній галузі, токенизована нерухомість; цінні папери; SPV; відновлення України; цифрові фінансові інструменти; пілотний випуск; беззбитковість активів під управлінням.

Statement of the problem. The legal object that can actually be sold is not the property title itself. It is a claim on an SPV, a note, or a pooled cash-flow vehicle. Ukraine requires state registration for real rights, and the 2022 Law on Virtual Assets still has not entered into force. In the EU, ESMA's March 2025 guidance states that the token form does not alter classification: when the holder receives rights equivalent to shares, bonds, or units in a pooled investment vehicle, the instrument remains inside financial-instrument or collective-investment analysis. A later article should therefore avoid the premise that an on-chain record itself replaces title [1, pp. 4-6, 11-12; 2, Arts. 2-3; 3].

This pattern extends beyond Ukraine. Garcia-Teruel and Simón-Moreno tested token-based property transfer across civil-law, common-law, and mixed jurisdictions and reported that the token entry alone does not move legal title; the change of right still depends on the national land-register statute [28].

Ukraine's demand side is substantial, but the legal and rate environment narrows the feasible design space. RDNA4 puts reconstruction and recovery needs at US\$524 billion over ten years. For 2025, priority spending totals US\$17.32 billion, of which US\$7.4 billion is secured, leaving a US\$9.96 billion gap. The NBU's key policy rate is now 15.0%. Draft law No. 10225-d passed first reading on 3 September 2025 and, as of the current bill card, is still being prepared for second reading. That combination means the first-stage Ukraine model should avoid any claim that on-chain title is already available and should be cautious with fixed local-currency coupon promises [19, pp. 9, 21; 20; 21; 2; 3].

Analysis of recent research and publications. The academic baseline is older than current market data. Baum tested the investment case for tokenized real estate and tied mass adoption to two preconditions: deeper secondary trading and lower per-issue compliance cost [29, pp. 41-61]. Current numbers match that diagnosis. Total tokenized real estate held below half a billion US dollars, and retail tickets remained small.

The observed market is still small enough for an entrant to matter, yet large enough to measure. BCG estimates tokenized real-world assets at approximately US\$28 billion in market capitalization in 2025, with tokenized funds above US\$3 billion AUM and private credit at approximately US\$10 billion. RWA.xyz is a dynamic dashboard, so the values below are treated as an observed snapshot. Because the dashboard mixes single assets, portfolios, funds, REITs, and debt, distributed value is used here as the headline anchor and the per-asset average is treated as a rough proxy for launch size. At access on 30 April 2026, the dashboard showed US\$296.85 million in distributed value across 78 assets, 13.51 thousand holders, and 11 countries. That implies a rough live average of about 173 holders per asset, though dispersion is wide. Deloitte's US\$4 trillion forecast for 2035 serves as an upper bound [4, p. 9; 5; 6].

Public fundraising benchmarks provide ticket-size and deal-size anchors. ESMA reports that 181 EU providers raised EUR 4.25 billion in 2024; 88% of investors were retail; 46% of projects raised less than EUR 1 million; and the average project raised about EUR 240 thousand in loan form, EUR 770 thousand in debt form, and EUR 640 thousand in equity form. In the 2023 EU sample, construction raised EUR 240 million, property drew 380,000 investors, the average retail ticket was about EUR 590, and cross-border money made up 17% of funding. The US public-offer route is much larger: Regulation A allows up to US\$20 million under Tier 1 and US\$75 million under Tier 2, while the SEC reports 1,531 qualified offerings and US\$10.463 billion reported raised by 31 December 2025 [7, pp. 4, 6-7; 8, p. 6; 17; 18].

The source base separates into two distinct business models, and they should not be mixed in one calculation. The French AMF study covers a development-finance model. It states that these deals are mainly bonds and loans, not equity. Average contractual returns ran 9.1-9.6% in 2017-2022, rose to 9.9% in 2023, and reached 10.7% in 2024. But late payment on projects in progress was around 30%, and the 2021 cohort reached a 36.9% delay rate two years after

funding. That is a debt-with-delay model, not a stabilized-rental model [9, pp. 2-3, 14, 18].

Dubai provides a different comparator. The Dubai Land Department pilot is backed by DLD, VARA, the Central Bank of the UAE, and Dubai Future Foundation. The pilot uses fiat, not crypto, and accepts subscriptions from AED 2,000. The first deal sold out in one day, drew 224 investors from 44 nationalities, and had an average ticket of AED 10,714. That implies about AED 2.4 million of subscribed capital on the first deal. DLD says digitised property-linked assets could reach 7% of Dubai's property market by 2033, or AED 60 billion. Company-reported operating figures from Stake add one more live benchmark: 95.4% occupancy, a 96.6% dividend-payment rate, 10.3% average annualized ROI on exited homes, and a high-yield screen above 5.8% rental yield. DLD's current fee pages publish 2% seller and 2% purchaser registration fees on sale value [10; 11; 12; 13; 14, pp. 6-11].

South Korea illustrates how current rule-making changes the business plan itself. In February 2025 the FSC moved to create legal grounds for shared-investment issuance, set KRW 1 billion equity capital for the new intermediary license, and required a clean split between issuance and distribution to avoid conflicts. In September 2025 the FSC moved to authorize secondary trading, but capped the first round at two licenses so liquidity would not fragment. This is material: primary issuance, secondary matching, valuation, and custody should not be treated as one unchecked business line [15; 16].

Kreppmeier, Laschinger, Steininger, and Dorfleitner hand-collected 173 US property-token offerings and 238,433 blockchain transactions, and found broad ownership by many small investors, while portfolios remained weakly diversified. This is consistent with the live RWA.xyz snapshot and the DLD pilot: one asset can attract a few hundred small holders, but secondary depth is still limited. This is material because a business plan built on frequent-trading assumptions would overstate fee income [22; 5; 12].

A 2025 systematic review by El Jaouhari, Samadhiya, Kumar, Chokshi, Šešplaukis, and Raslanas covers 75 peer-reviewed papers on real-estate tokenization. The review organises evidence under technology, organisation, and environment headings and identifies three persistent barriers: technological risk, statute fragmentation between jurisdictions, and

resistance among incumbent registry operators [30, pp. 297-315].

Konashevych compared the cost of property records under registry and chain-anchored designs. The author identified three benefits that survive across cases: a permanent transaction log, lower audit cost on transfer, and easier search for liens. The same paper flagged three constraints that have not been removed by later technology: state monopoly over the land register, the cost of identity proofing, and the absence of legal weight for a private-chain entry without an enabling statute [31, pp. 109-127].

Highlighting previously unresolved parts of the overall problem. The literature surveyed covers supervisory volumes, statute texts, and issuer disclosures, yet several inputs the operator must price for a Ukrainian pilot remain absent in comparable public form. The weakest public inputs are operator acquisition cost per investor, KYC/AML cost per verified client, smart-contract audit cost, custodian or registrar cost, and legal drafting cost. The source base above is sufficient for the revenue side, target ticket size, project-size bands, yield bands, delay bands, and statutory constraints. The unresolved gap is therefore the cost side of the issuer P&L and the calibration of an SPV property security to Ukraine's statute and macroeconomic setting in 2026.

Formation of the objectives of the article (task statement). The source base distinguishes observed market volume, statute text, supervisory reports, issuer disclosures, and long-range forecasts. These sources do not carry equal evidential weight. For the later calculation, observed volume and current law anchor the main case. Issuer disclosures and long-range forecasts serve only as range checks.

The data support two linked calculations. First, operator P&L: setup fee on each new issue, annual servicing fee on outstanding AUM, and trading fee on secondary turnover. Second, investor economics: net cash yield plus price gain minus issuance costs, transfer costs, servicing costs, delay loss, and default loss. The evidence supports one main case as the strongest candidate: a fiat-settled, SPV-based, securities-law route for completed or near-completed income-producing assets, with periodic liquidity windows rather than a promise of constant deep trading. The French debt case should serve as the higher-yield, higher-delay comparator, not as the default structure for a first Ukraine launch [1-3; 9-21].

Summary of the main research material.

Observed market size supports a pilot in the low single-digit millions. The live RWA property monitor, accessed 30 April 2026, shows US\$296.85 million across 78 assets, or about US\$3.81 million per asset, and 13.51 thousand holders, or about 173 holders per asset (author's calculation from [5]). ESMA reports that EU crowdfunding in 2024 averaged about EUR 640 thousand per equity project and EUR 770 thousand per debt project, while 46% of projects raised less than EUR 1 million. Dubai's first state-backed deal sold out in one day, drew 224 investors from 44 nationalities, and had an average ticket of AED 10,714, which implies about AED 2.4 million of subscriptions (author's calculation from [11], [12]). A US\$3 million pilot falls between the EU average project and the live on-chain average asset [5; 7, pp. 6-8; 11; 12].

The U.S. public-offer route indicates that a small pilot is an economic choice, not a legal ceiling. Regulation A permits up to US\$20 million under Tier 1 and US\$75 million under Tier 2. SEC statistics record 1,531 qualified offerings and US\$10.463 billion reported raised through 31 December 2025. The statute provides sufficient capacity for later scale. It does not justify a large first issue before the operator has distribution and servicing capacity [17; 18].

A model that re-registers the property itself on every small trade is prohibitively expensive. Dubai's ordinary sale registration fee remains 2% for the seller and 2% for the buyer, before fixed charges. Secondary liquidity must therefore operate at the issuer-security level. It should not require a new land-registry transfer each time a token changes hands [13].

The French debt comparator indicates why development finance should not be the first product. The market is still funded mainly through bonds and loans. Contractual returns rose to 10.7% in 2024. Yet about 30% of projects in progress were late, the 2021 cohort reached a 36.9% delay rate after two years, the weighted average term was about 24 months, and almost 75% of deals repaid principal and interest only at maturity. Under the stated no-compensation delay assumption, a two-year bullet claim promising 10.7% annual simple return produces a 21.4% total return. If 30.0-36.9% of claims pay six months late, the compound annualized return is about 9.28-9.44% using average duration, or about 9.80-9.95% under simple annualization [9, pp. 2-3, 14, 18].

To proceed from comparators to a business plan, the model separates issue economics from

firm-level AUM economics. For one issue of size A , held for H years, operator contribution is:

$$\pi = \alpha A + H(\beta + \gamma\tau)A - K \quad (1)$$

The minimum efficient issue size is:

$$A^* = K / [\alpha + H(\beta + \gamma\tau)] \quad (2)$$

For the firm as a whole, recurring break-even AUM is:

$$AUM^* = G / (\beta + \gamma\tau - h) \quad (3)$$

Here α is the one-time placement fee, β the annual servicing fee on outstanding asset value, γ the fee on secondary matched volume, τ the annual turnover ratio, K the net unreimbursed launch cost for that issue, G annual fixed overhead, and h annual variable service cost. The horizon is set at $H = 2$ years because the French comparator reports a 24-month weighted average term [9, p. 18]. The values for α and β follow the strongest public issuer disclosure available: Arrived's SEC filing states a 3.5% one-time sourcing fee, a 0.6% annual asset-management fee, and reimbursement of offering expenses up to 2% of gross proceeds [9, p. 18; 25].

Three inputs remain planning assumptions because public issuers do not disclose them in a comparable form: $\gamma\tau = 0.25\%$ per year, $h = 0.30\%$ per year, $K_0 = US\$155,000$ for the first issue, and $K_1 = US\$115,000$ for repeat issues after documents and reporting lines are standardised. Under the conservative public-fee case, the first efficient issue is about US\$2.98 million and a repeat issue about US\$2.21 million (author's calculation from [25]). If secondary-market revenue is set to zero, the first threshold rises only to about US\$3.30 million and the repeat threshold to about US\$2.45 million. The pilot does not depend on frequent trading. It depends on clearing a minimum issue size. A round target of about US\$3 million is therefore the appropriate launch threshold [25].

Firm-level scale is harder than first placement. With $\beta = 0.6\%$, $\gamma\tau = 0.25\%$, and $h = 0.30\%$, recurring break-even AUM lies between about US\$63.6 million and US\$109.1 million if annual fixed overhead is US\$0.35-0.60 million (author's calculation). That equals about 21-36 active issues of US\$3 million each. If the operator adds a small registrar and reporting spread and lifts β to 0.75%, the range falls to about US\$50.0-85.7 million, or 17-29 active US\$3 million issues. The conclusion holds in both cases: a property-token issuer becomes durable only after it accumulates a portfolio, not after a small number of individual transactions [25].

The investor base for the pilot cannot be mass retail. At US\$3 million, a deal

with 200-300 investors needs an average subscription of about US\$10,000-15,000. Even with Dubai's 224-investor first deal, the implied average ticket on a US\$3 million issue would be about US\$13.4 thousand. ESMA reports that the average retail crowdfunding ticket in the EU was around EUR 590 in 2023 and EUR 660 in 2024. The first phase should therefore target professional, qualified and high-net-worth buyers. A broader retail phase becomes plausible only after issue costs fall or several assets are pooled into one vehicle [7, p. 7; 12; 8, p. 6].

Ukraine's macroeconomic context supports this sequence. RDNA4 puts total recovery and reconstruction needs at US\$524 billion and the 2025 priority gap at US\$9.96 billion. The NBU kept the key policy rate at 15% on 19 March 2026. Under these conditions, the first product should avoid fixed hryvnia coupons and direct-title claims. It should use bank settlement, full KYC, SPV ownership, completed income property, and scheduled liquidity windows. A later phase can add development debt, mixed portfolios, or a secondary venue once AUM passes the lower break-even band [19, pp. 4, 21; 20].

Public filings allow a lower-bound calculation of the opening issue. Arrived discloses a 3.5% sourcing fee, a 0.6% annual asset-management fee, reimbursement of offering expenses up to 2% of gross proceeds, and a 1% brokerage fee [25]. The same filing lists a US\$10,000 consulting fee and a US\$5,000 advance for out-of-pocket expenses, both treated here as opening-issue, sponsor-level filing costs rather than recurring per-series charges [25]. If P is the value tied to the asset at closing and A is the gross issue size, the first issue can be written as:

$$A = (1.035P + 15,000) / 0.97 \quad (4)$$

Because the 3.5% sourcing fee is calculated on the property purchase price while the 2% offering-expense reimbursement and 1% brokerage fee are calculated on gross offering proceeds, this stricter simplified expression treats the two bases separately, before acquisition expenses, reserves, local taxes, and other transaction costs. With $P = \text{US\$}2.5$ million, A is about US\$2.68 million. With $P = \text{US\$}3.0$ million, A is about US\$3.22 million. Any local transfer tax, notarial charge, or acquisition fee pushes the upper end higher. The practical pilot band is about US\$2.7-3.3 million. The legal ceiling is much higher. Regulation A permits up to US\$20 million under Tier 1 and up to US\$75 million under Tier 2 [17].

The subscription book follows from simple arithmetic. A US\$3.22 million gross issue needs

average subscriptions of about US\$16,100 from 200 investors, US\$12,900 from 250 investors, or US\$10,700 from 300 investors. DLD's first sale drew 224 investors, and the average individual subscription was AED 10,714 [12]. ESMA reports an average retail crowdfunding ticket of about EUR 660 across the EU in 2024 [7, p. 7]. The numbers preclude broad retail as the first buyer group. The opening book requires diaspora investors, qualified investors, family offices, and small syndicates. Broader retail becomes feasible later, after issue costs fall or several assets are pooled.

The fee mix also indicates the business structure at the initial stage. A property value of US\$3.0 million yields a one-off sourcing fee of US\$105,000 and an annual management fee of only US\$18,000 [25]. The ratio is about 5.8 to 1. Every US\$10 million of live property value adds only US\$60,000 of yearly management-fee income. A book of seventeen US\$3.0 million assets yields about US\$306,000 per year. Thirty-three such assets yield about US\$594,000. An issuer does not become durable after a small number of individual transactions. It requires repeated placement and a growing book of live assets. Dubai and Korea followed the same sequence: primary issuance first, resale after the first book was established [26; 16].

Dubai uses a deed-native route: DLD issues the title-linked unit, PRYPCO runs the investment round, Ctrl Alt mints and keeps the unit in custody, and the buyer's share is registered with DLD. The United States uses an issuer-native route: each home sits in a separate series and property-owning subsidiary, buyers purchase interests in that series, a transfer agent keeps the holder register, and a broker-dealer with an ATS handles resale. Ukraine can use only the second route under current law, because rights in immovable property arise, change, and end only from state registration, while Law No. 2074-IX has not entered into force and bill No. 10225-d is still at the second-reading stage [1, pp. 6, 11-12; 2, Art. 3(2); 2, Art. 4(1); 3; 21; 27, cls. 3.1-3.3; 25, p. F-8].

A synthesis emerges when these texts are read in parallel. Every property-linked issue touches four registers: the title register, the investor register, the cash ledger, and the token or custody ledger. In the Dubai route the title register is DLD's register. In the SPV route it is the SPV's charter and share or membership register. Define Δe as the mismatch between the set of registers that must update in event e and the set that actually updated. If Δe is above zero, the

next gate stays closed. This rule is not written as a single clause in any one source, but it follows from DLD's title-deed process, PRYPCO's wallet and custody clauses, and Arrived's sequence for cash transfer, broker execution, and transfer-agent entry [13; 27, cls. 2.22, 3.1-3.2, 7.1, 10.1; 25, pp. 62, 130].

The first gate is asset intake and price control. Dubai's pilot admitted only ready-to-own assets and required price, risk factors, and technical details to appear before sale. PRYPCO states that it checks sale price through DLD smart valuation or an independent accredited valuer. Arrived treats appraisal, title, inspection, closing, and other pre-closing work as acquisition expenses tied to each series. The operator should therefore withhold marketing until the asset has passed three concurrent checks: legal clean title, independent price test, and a full fee map [11; 27, cls. 3.3, 3.4; 25, p. 130].

The second gate is legal packaging and role split. Korea's FSC created a legal path for issuance and later opened a separate license for distribution. It also required firms to choose between issuance and distribution and capped the first trading round at two licensees. Arrived separates the manager, broker-dealer, transfer agent, and property manager. PRYPCO separates DLD, the issuer portal, the custodian, the bank, and the property manager. A property-linked issue should replicate that separation. One asset goes into one legal vehicle. One venue matches trades. One register records title or membership. One bank or client-money account handles cash. One property manager runs the building [27, cls. 3.1, 10.1, 11.1; 15; 16; 25, pp. 61-63, 130, F-8-F-9].

The third gate is investor admission and cash admission. PRYPCO accepts bank transfer, electronic debit, or card payment after KYC and AML checks and rejects cash. Funds in the wallet sit in a third-party client money account with Zand Bank, while government fees sit in a DLD trust account before transfer. Arrived follows a different procedure: Dalmore reviews investor information, KYC and AML data, and the subscription agreement; the manager may accept or reject a subscription within fifteen days. No person enters the holder register and no unit is issued before identity, source of funds, and subscription terms are cleared [27, cls. 2.22, 7.1, 7.3, 10.1, 14.2-14.4; 25, pp. 127, 130].

The fourth gate is bookbuilding and closing. Public documents show two lawful closing scripts. PRYPCO runs a funding round with a stated target. If the target is not reached,

the round stops and money returns to the buyer's wallet. Arrived runs each open series on a best-efforts, no-minimum basis. Once the subscription payment is accepted, interests are issued and the buyer becomes a holder. A project should choose one closing script before launch and keep it unchanged during the round. Combining a target-based round with rolling acceptance creates legal and accounting friction [27, cls. 3.2, 3.5; 25, pp. 126, 130].

The fifth gate is asset operation and cash waterfall. PRYPCO appoints an independent property manager for daily management and maintenance, keeps reserve funds for repairs, pays dividends only after costs, and lets investors vote on large works or a change in the holding term. Arrived appoints a property manager, charges the series an annual asset-management fee of 0.6 percent of purchase price from net rental income, and charges an eight percent property-management fee on rents collected. If the property is vacant, the manager does not earn that rent-based fee. The operator should therefore treat the chain as a rights register, not as a substitute for property management, rent collection, insurance, repairs, or reserve accounting [27, cls. 10.1-10.5, 11.1-11.4, 13.1-13.3; 25, pp. 4-5, F-9].

The sixth gate is reporting and repricing. Arrived adjusts purchase price quarterly to NAV per interest and files a pricing supplement for the next period. PRYPCO gives each buyer an ongoing statement of realized income and expenses and updates property valuation every six months. Secondary transfers should not open before the project fixes its valuation clock and disclosure clock [27, cls. 12.1-12.2; 25, p. 95].

The seventh gate is transfer and resale. Korea opened issuance first and distribution later. Dubai opened resale only in Phase II and kept that stage inside a controlled pilot. PRYPCO restricts resale until the lock-in period ends and caps the listing price at no less than 85% and no more than 115% of the latest DLD smart valuation shown on the platform. Arrived routes orders from its user interface to the executing broker and the PPEX ATS; cash then moves through Modern Treasury, the transfer agent moves the interests after market hours, and clearing takes one to two days. The sequence provides a rule for a new issuer: start with one matching venue, narrow transfer rules, and a known price anchor. A full deed transfer still carries a two percent charge to the seller and a two percent charge to the buyer in Dubai, so repeated micro-sales should stay at the issuer-security level rather

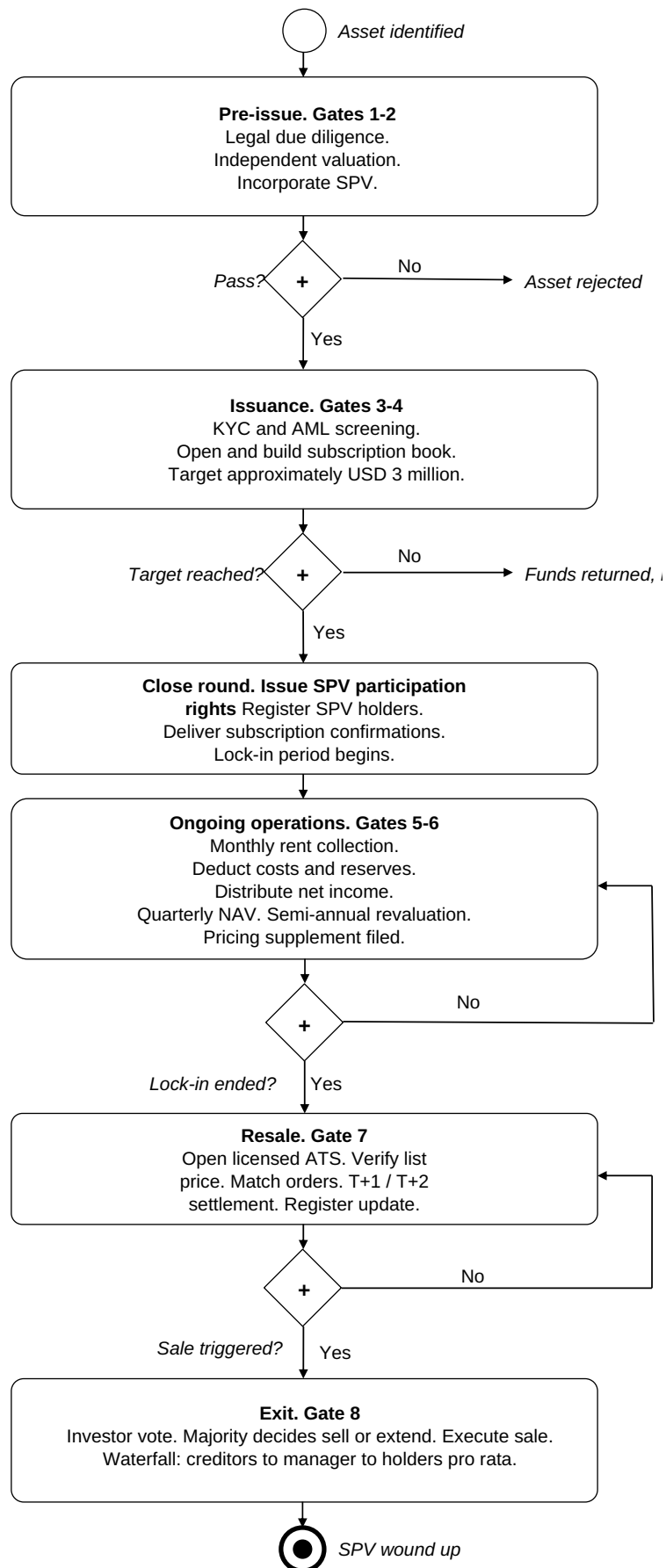


Figure 1. Simplified business-process circuit of the SPV property-linked issue

Source: developed by the authors

than reopen the register step each time [26; 13; 27, cl. 15.2; 16; 25, pp. 62-63, 98, 130].

The eighth gate is sale, liquidation, and final cash distribution. PRYPCO invites buyers to vote at the end of the holding term on sale or a one-year extension. A sale vote also opens when the property reaches a market value that implies ROI above 30%. The vote on sale stays open for fourteen days, and a simple majority decides the matter. Arrived states a liquidation order: first third-party creditors, then the manager or its affiliates if they are creditors, then holders of the relevant series pro rata. The exit route must be written before the first unit is sold. If the project leaves the sale trigger, voting window, or payout order undefined, the business process halts at the stage when cash flows are largest and disputes are most likely [27, cls. 4.1-4.5, 11.2-11.4; 25, pp. 96-98].

Conclusions. The work reaches one practical answer. A first-stage Ukrainian property-token issue should be one SPV-backed security tied to a completed income asset, with a target gross issue of about three million US dollars, opened to qualified buyers and settled in fiat.

The economics of the issue follow from a single set of fee inputs. A one-time placement

fee on the asset price, an annual servicing fee on outstanding value, and a small fee on secondary turnover decide the lower bound on issue size.

Firm-level survival is a different problem. The same fee structure says that recurring breakeven AUM falls between roughly sixty and one hundred ten million US dollars under realistic overhead, or about twenty to thirty active issues. A property-token issuer becomes durable only after this portfolio is in place. The opening years are therefore spent on repeated placement and on cutting per-issue documentation cost.

Rights in immovable property arise, change, and terminate from state registration. The token is therefore a record of a claim on an SPV that owns the asset, not a record of the title itself. The deed-native route requires a registry that recognizes a title-linked token.

The cost side of the issuer P&L is not yet disclosed in comparable public form across issuers; the planning assumptions used here are conservative but call for replacement once real Ukrainian pilot data arrive. The legal status of tokenization is unresolved in Ukraine, and any title-native variant must wait for the underlying statute.

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