

**Endowing the Built Environment:
Renewal Finance and the Institutions That Keep It Funded**

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Abstract

A building can be paid for at completion and still lack a credible provision for the work that will keep it usable. This paper examines an endowment dedicated to that continuing obligation, including a development model that retains rental apartments to support common renewal. A launch constraint prices retained assets at their foregone selling value. A reproducible 60-year model then compares rental income, liquid reserves and financial investments with equal initial dedicated capital, recurring component work and a rolling 20-year funding assessment. Under the illustrative baseline, the rental endowment retains cash and property at year 60 but has overdue work and a continuation-funding gap. A higher-return financial portfolio meets the baseline obligations; an ordinary reserve holding the same portfolio produces identical results. Endowment therefore supplies neither free capital nor a financial advantage by designation. Its possible contribution lies in sustaining a commitment through changes of owners, managers and circumstances. The second half develops a commercial stewardship institution with segregated client assets, independent engineering, explicit fees, portable records and a replaceable manager. Bounded legal comparisons show why such an institution would require local mandates rather than a universal ownership wrapper. Continued service, affordability and environmental benefit remain separate objectives requiring explicit decisions.

After the keys change hands

At handover, an apartment building can have a buyer for every unit, a completed construction account and no unpaid contractor. Its roof will nevertheless age. Lifts will need replacement; shared services will have to be renewed; regulations or patterns of use may require work that was never part of the original design. The money that paid for construction cannot also be presumed available for those obligations.

Owners can meet them through regular contributions and occasional assessments. A landlord can fund them from rental income. A developer or public authority can provide an initial reserve. The practical question is whether the chosen arrangement places usable resources behind the future work, with an authority capable of commissioning it when needed.

An endowment dedicated to a building is one possible arrangement. Here, an endowment means assets whose use is committed to a continuing service purpose, under enforceable rules about expenditure and disposition. It need not prohibit every sale of capital. A rigid ban on selling an unproductive asset could undermine the purpose it was meant to protect. What matters is the destination of value and the obligations attached to it.

The proposal considered here has two parts. First, some of the economic surplus available when an asset is created is committed to its renewal. One implementation retains income-producing apartments and an opening cash reserve. Second, a specialized steward maintains the engineering plan, funding assessment, investment mandate and institutional record across changes in ownership and personnel.

The strongest alternative is an ordinary reserve financed adequately and administered well. It should not be weakened in the comparison by giving it less money, less competence or fewer powers. If both arrangements commit the same resources to the same obligations, their difference must be located in investment choices, legal durability, incentives or administrative performance. A new name does not itself improve any of them.

What must be maintained

Three quantities can move in different directions: the price of a property, the value of its financial provision, and its capacity to provide service. An appreciating location can conceal a deteriorating building in market-value accounts. A growing fund can conceal postponed work. A sound roof can coexist with a reserve insufficient for the next expensive intervention.

For this reason, “maintaining capital” is too ambiguous to serve as the objective without further specification. We use continued service as the governing purpose: the asset should remain capable of performing an agreed function at a stated standard, or undergo an authorized adaptation or exit when that purpose is no longer defensible. Financial provision is assessed against the work required by that purpose.

Accounting depreciation alone does not supply cash. It allocates costs under an accounting convention. A reserve is an actual claim on resources, and a maintenance plan is a schedule of actions. They can inform one another, but none substitutes for the others. Refinancing can move the date and bearer of a payment; its proceeds come with another obligation.

Lifecycle costing provides a disciplined way to compare expenditures over time. NIST’s manual distinguishes inflation adjustment from discounting and, importantly, present-value evaluation from provision for year-by-year disbursements (Kneifel and Webb 2025, secs. 3.3.1–3.3.3). A project with an acceptable lifecycle cost can still lack money when a particular invoice falls due. The analysis below retains both the time path and the total commitment.

The investment problem also depends on the service being financed. Merton’s treatment of university endowments relates investment policy to other institutional resources and uncertain activity costs (Merton 1991, abstract). Applied here, the relevant question is how income and assets behave when the building needs money. Apartments in the same building may lose rental income at precisely the time a serious defect increases expenditure.

Endowed stewardship already has close precedents. The Land Trust accepts land together with financial provision for its continuing management (The Land Trust, n.d.). The Parks Trust describes a property endowment established alongside its parkland responsibilities and continuing support from property and investment income, as well as other sources (The Parks Trust, n.d.). These examples establish that the institutional family exists. They do not demonstrate that a particular apartment scheme can finance itself indefinitely.

The housing question adds obligations these precedents cannot settle for it. Who benefits from dedicated rents? Who pays when they disappoint? What authority survives a change in the apartment

owners? Can a manager be removed without releasing the capital from its purpose? A funding calculation becomes a stewardship arrangement only when those questions receive operational answers.

The capital has to come from somewhere

Consider an illustrative development of 125 apartments with a total cost of EUR 10 million. Assume there is no construction borrowing, and that every apartment could be sold for EUR 120,000 on the same net-of-selling-cost basis. These are arithmetic assumptions, not estimates of a particular city's market.

Selling 100 apartments produces EUR 12 million. Twenty-five remain. After paying the entire development cost, EUR 2 million of cash remains; allocating EUR 300,000 to the building's opening reserve leaves EUR 1.7 million as the developer's cash surplus before project taxes. The retained apartments have a selling opportunity value of EUR 3 million.

It would be misleading to describe the retained apartments as a costless by-product of selling the others. Their construction cost is already inside the development account, but their foregone sale value is part of the founder's commitment. In this example, the whole development's EUR 5 million surplus is divided into EUR 3 million of retained property, EUR 300,000 of liquid provision and EUR 1.7 million of developer cash surplus.

The distinction also resolves an apparent extra profit. The margin on the sold apartments can be calculated against their allocated share of construction costs. That margin is not the cash left after constructing all apartments, including those retained. Counting both would finance the endowment twice on paper.

Let N be the number of units, p their net selling price, D total development expenditure, n the units retained, F_0 the opening cash reserve and Π the required developer cash return. If a retained unit contributes annual net income q , and the required annual provision is A , two launch conditions are

$$(N - n)p \geq D + \Pi + F_0, \quad nq \geq A.$$

The feasible integer range is

$$n_{\min} = \lceil A/q \rceil, \quad n_{\max} = \min \left(N, \left\lfloor \frac{Np - D - \Pi - F_0}{p} \right\rfloor \right).$$

There is a solution only when $n_{\min} \leq n_{\max}$. With net rent of EUR 4,800 per retained unit per year, the example supports EUR 120,000 of annual provision with exactly 25 retained units. If required provision rises to EUR 150,000, at least 32 units are needed while the sales constraint still permits only 25. Better administration cannot close that launch gap.

These inequalities are necessary checks, not a sufficient financing plan. They collapse development into a completed transaction. A real project also needs a dated construction and sales cash flow, contingencies, taxes, financing costs and enforceable transfers of title. If the reserve is already included in D , it must not be added again as F_0 .

The income assumption requires similar care. The EUR 4,800 is after the rental apartment's own operating costs, interior renewal and operating taxes, but before the shared building work and the steward's fee. The model funds common obligations for the whole building, including the retained apartments. It does not both deduct their common-property share from rent and charge the whole expense again below it.

A sponsor could accept a smaller cash return, contribute more capital, reduce construction cost, or establish a different service commitment. Purchasers might pay for the reduction in future assessments. Public support might fund a benefit not rewarded in sale prices. Each changes who finances the provision. None removes the economic cost of committing it.

A building through several renewal cycles

The simulation begins with equal dedicated economic capital of EUR 3.3 million in every treatment. The rental endowment holds 25 apartments valued at EUR 3 million and EUR 300,000 in cash. The conventional liquid reserve holds the full EUR 3.3 million. The financial endowment also holds EUR 3.3 million in liquid investments. Initial component condition and whole-building obligations are identical.

The conventional reserve and rental cash earn an assumed real return of 2%. The financial portfolio earns an assumed 4% real in the baseline. These rates describe different portfolio assumptions, not rewards for institutional virtue. A fourth treatment gives the conventional reserve exactly the financial portfolio's return path; it is an equivalence control.

The horizon is 60 years, with a fresh 20-year funding assessment at every annual review. Twenty years is a planning window, not a demolition interval. Four recurring component programmes represent lifts, the roof, the facade and shared services. Their assumed replacement intervals are respectively 20, 25, 30 and 30 years. Initial intervention costs are EUR 350,000, EUR 450,000, EUR 700,000 and EUR 550,000. Routine work begins at EUR 30,000 annually, and the common stewardship fee is EUR 15,000.

All cash is expressed in constant purchasing-power euros. Construction and routine-work costs increase by 1% annually relative to that purchasing-power measure in the baseline; net rents remain constant in real terms. The return assumptions are after investment costs and before the separately charged steward fee. No borrowing, asset appreciation or automatic new owner contribution is included. The rates, lives and costs are illustrative inputs, not engineering recommendations.

For a solvent account, the annual cash identity is

$$F_{t+1} = F_t(1 + r_t) + Y_t + L_t + S_t - C_t - H_t,$$

where Y_t is rental income, L_t an explicit owner injection, S_t proceeds from an authorized asset sale, C_t routine and executed renewal expenditure, and H_t the fee. Returns and income are credited before that year's expenditures. Separate state variables record component ages and overdue work.

When a component becomes due, its replacement occurs only if funding and approval permit. Otherwise it remains overdue. Replacement resets age when the work actually happens, rather than when it was originally scheduled. Negative operating balances remain recorded as unpaid obligations and earn no return. They are a failure indicator, not a source of free credit or an assumption that service can safely continue.

An overdue component-year is deliberately a modest measure. It counts a year beyond an assumed intervention date. It is not a measured outage, a probability of structural failure, or a claim that all four components have equal consequences for residents. A practical system would need condition inspections, criticality and service-specific safety thresholds.

The rolling assessment calculates the minimum opening liquidity required to perform the next window's projected work on time. It uses the maximum cumulative discounted funding deficit, so the date of expenditure matters. Future shocks are not known in advance. At the final year, the calculation continues beyond the reporting horizon using actual component ages. Property value is reported separately; it is not added to future rental income to finance the same obligation twice.

What the funding comparisons show

The baseline rental endowment first leaves work overdue in year 60. Its liquid balance is still EUR 425,705, and the apartments remain held. Yet its projected continuation-funding gap is EUR 1.306 million. A report displaying only cash plus property value would omit the failure to execute due work and the shortfall in the next funding window.

The 2% liquid reserve first leaves work overdue in year 50. The 4% financial fund performs all scheduled work in the baseline and ends with EUR 7.419 million of liquid assets. Its result is conditional on the assumed uninterrupted return path. The conventional reserve with the identical 4% portfolio produces exactly the same annual ledger, interventions and final position.

This equivalence matters to the argument. An endowment can change the legal destination of value or the incentives to withdraw it. It cannot create an investment advantage that disappears as soon as the comparison uses the same portfolio. Whether the ordinary reserve is legally permitted to hold that portfolio is a separate question, addressed below.

The baseline also permits an initial-funding calculation. Holding the retained apartments fixed, about EUR 519,418 of additional opening cash is required for the rental arrangement to execute the scheduled work and satisfy the final continuation check. The 2% liquid reserve requires about EUR 2.289 million beyond the common starting capital. These are conditional funding thresholds for this model. They are not prudent capital recommendations, and neither includes every future

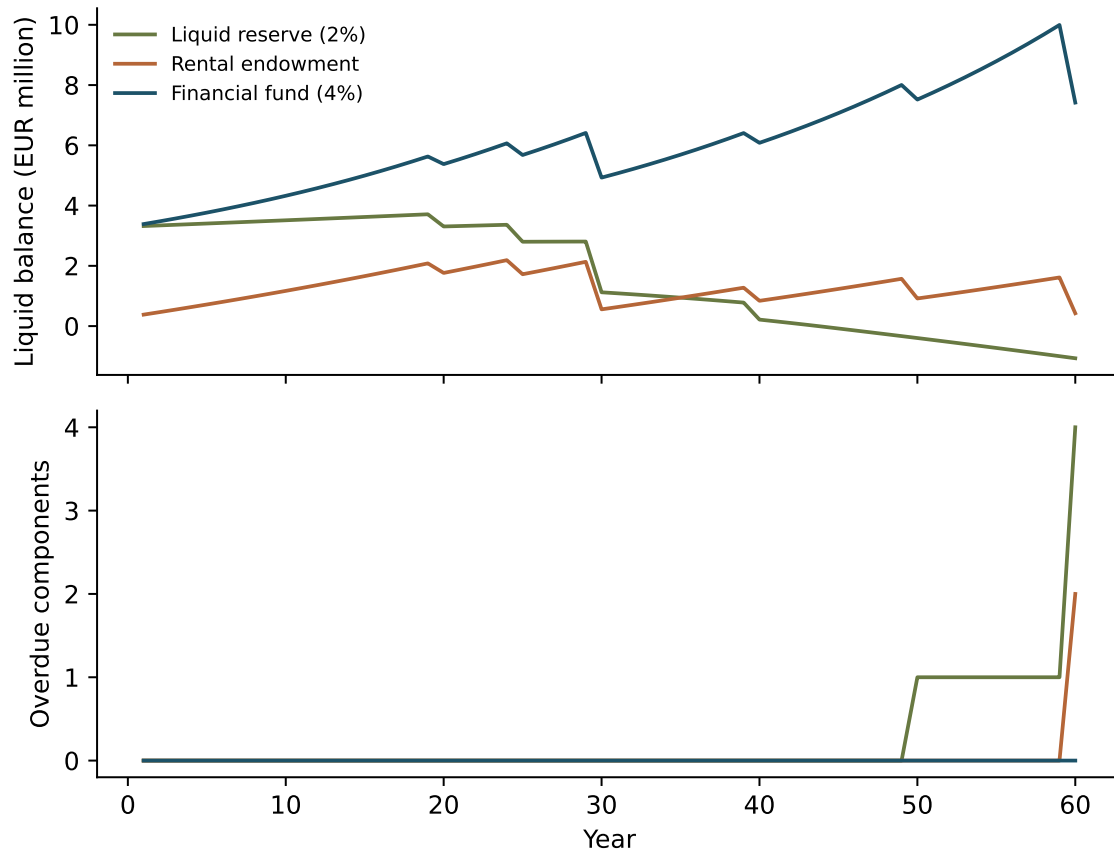


Figure 1: Baseline liquid balances and overdue components. The treatments begin with equal dedicated economic capital; the rental treatment holds most of it in property. Negative balances record unpaid operating obligations. The higher-return portfolio is an assumption, not an estimated endowment premium.

adaptation liability. Committing that extra cash at handover would reduce the developer's return or require another identified contributor; it cannot be added without reopening the launch account.

The stress comparisons prevent the smooth baseline from becoming a promise. Replacing one financial-portfolio return with a 35% loss in year 19 produces overdue work by year 60 and a final continuation gap of EUR 4.659 million. Moving the loss to year 21 changes the result even though the sequence contains the same annual return values. Payments occurring between the two dates make investment sequence matter.

The same-building exposure is tested by requiring an early roof replacement and reducing rental income during the same period. All treatments face the physical intervention; only the rental-funded account suffers the associated income loss. In that scenario the rental treatment first leaves work overdue in year 40. The assumed correlation is a designed stress, not an estimated frequency, but it identifies an exposure that a comparison of average yields would miss.

Approval can fail independently of funding. A two-year decision delay leaves the financial treatment with more terminal cash than in its timely-work baseline and with 12 overdue component-years. Some work has moved beyond the reporting date. It would be perverse to call the larger balance better performance. The continuation assessment helps reveal the displaced expense; the overdue-work count reveals the interruption to the plan.

Further runs increase relative construction-cost growth, double fees, and combine the stresses. Separate policies permit owner calls or whole-apartment sales. In the combined rental case, calls amount to EUR 6.548 million over the simulated period. They remove funding-related deferrals but cannot remove the assumed approval delay. Liquidation eventually sells all 25 retained units, reducing future rent and still failing to establish continuation funding. Neither policy is concealed inside the baseline.

These results do not rank actual financial products or establish a probability of success. The model has no calibrated return distribution, engineering hazard function or local tax system. It also omits transaction costs on emergency property sales, making that option unusually favourable. Its useful result is the separation of launch resources, annual liquidity, physical execution and future provision. An institutional proposal has to explain how it will maintain those relations when the original actors have left.

The steward's mandate

A worldwide stewardship company could supply continuity without owning every client asset. The proposed boundary is straightforward: client entities retain ownership and custody of their dedicated resources; the company sells the continuing professional service needed to keep the plan, accounts and decisions coherent.

Its mandate would join tasks often discussed separately. It would maintain an asset register, arrange independent condition assessments, translate those assessments into dated work and cash requirements, monitor permitted investments, prepare decisions for the competent local body, su-

pervise procurement within delegated limits, and report the consequences of deferral. The promise would be to perform these duties competently and disclose gaps. A guarantee that every client will always be funded would be a different product, requiring explicit capital, insurance and limits.

A mandate should begin with the service and the people entitled to it. “Preserve the building” is insufficient when a retrofit may improve accessibility, a change of use may be necessary, or demolition may eventually be the responsible choice. It needs standards for safety and habitability, a way to identify beneficiaries, and a procedure for changing the service commitment.

An initial engineering assessment should separate urgent defects, ordinary renewal and possible adaptation. It should distinguish what is known from what is inferred from age. The funding assessment then uses those distinctions. Assigning a precise replacement year to an uninspected component can make a ledger look more certain without making the obligation more tractable.

The annual review should place a decision in front of the client: the approved work, the resources available at the relevant dates, and any gap under the agreed stresses. If the gap is material, the record must identify the response and the party responsible for it. An increased contribution, a changed investment allocation, an asset disposal and a reduced service commitment distribute costs and risks differently. The manager cannot make them equivalent by relabelling them as adjustments.

The model’s rolling forecast deliberately does not compel contributions automatically. A projection is information; authority to levy, collect and spend comes from a legal and institutional arrangement. The business case for a steward depends in part on whether it makes that information useful soon enough for authorized actors to act. A contract that only produces reports after the relevant decision has become unavoidable supplies little continuity.

Authority without an irremovable manager

The central distinction is between an enduring purpose and an enduring service provider. The purpose may need protection from a temporary majority’s wish to distribute reserves. The provider must remain answerable for fees, procurement, technical judgment and performance. Binding the two together would make removal of a failing company threaten the very provision it was supposed to protect.

The proposed allocation of authority separates several roles.

Role	Responsibility and restraint
Client owner or purpose entity	Holds the assets and defines beneficiaries; cannot release dedicated value outside the lawful mandate.
Resident or owner governing body	Approves plans and material changes within its powers; records refusals and their consequences.

Role	Responsibility and restraint
Independent engineer	Assesses condition and intervention needs; discloses uncertainty and conflicts.
Steward	Integrates the plan, funding and execution record; acts within delegated authority.
Custodian and auditor	Hold or reconcile assets and verify transactions independently of the steward.

This is a proposed division of functions, not a universal legal entity chart. Small buildings may combine some roles through service contracts. What should not disappear is the ability to distinguish a recommendation, an authorization, a payment and an inspection of the completed work.

An engineer paid only when a large replacement is approved has an obvious incentive problem. A steward that earns procurement rebates has another. The mandate should disclose related parties, prohibit undisclosed commissions, require independent review of conflicted transactions, and separate the acceptance of completed work from the contractor's own certification. Competitive tendering is useful where appropriate, but the cheapest quotation does not settle technical adequacy or lifecycle cost.

Emergency authority needs definition before an emergency. A manager should have an agreed route to secure the site, obtain competent assessment and initiate work within lawful powers. Spending limits, notification duties and subsequent review can control that authority. Requiring a fresh discretionary vote for every urgent intervention can make an otherwise well-funded structure unable to act.

Replaceability should be practical. The client needs continuing access to the component register, contracts, inspection evidence, accounts, models and assumptions in usable formats. Bank and custody relationships should not vanish with the manager's software account. A replacement provider needs records of unresolved defects and unexecuted decisions, not merely the previous year's balance sheet.

The same principle applies to the stewardship company itself. Its shareholders can own and transfer the business; they should not thereby acquire beneficial ownership of client reserves. Mission-protecting provisions in its constitution may reinforce its purpose, but client protection should not depend solely on the founders remaining benevolent or retaining control. The contracts, custody arrangements and rights of inspection must continue to work after a sale of the manager.

This model also needs scrutiny from the people living with its decisions. An owner vote is not necessarily a tenant voice. Residents need a route to report a failing service, obtain reasons for a deferral, and challenge an inaccessible or unsafe intervention. Technical review can determine whether a component is adequate; it cannot by itself decide whose disruption or loss of access is acceptable.

What can be shared across borders

The attractive part of a worldwide company is the possibility of maintaining specialist capacity that a single building cannot reasonably employ. Procurement knowledge, accounting controls, model maintenance, training and audit methods can be shared. Local inspection, emergency response, title, taxation and authority to collect money remain tied to particular places.

Ostrom's discussion of polycentric service provision gives a useful caution about organizational scale: activities with different production requirements need not be assigned to the same size of provider (Ostrom 2009, 1–4). The proposed application here is a common professional infrastructure serving distinct local mandates. It is not a claim that centralizing ownership would improve all of those mandates.

Shared administration does not require shared investment ownership. A company can operate a common reporting system while every client retains separate accounts and assets. Pooled investment is a further decision involving custody, allocation, liquidity and exit rules. Cross-subsidy is another decision again. It should not emerge because a manager transfers money from a new client's reserve to meet an old client's repair bill.

If clients deliberately establish mutual support, the contribution rule and contingent claims must be explicit. A pool exposed to correlated local defects or construction inflation needs resources for that exposure. Calling it solidarity does not make its liabilities disappear. Conversely, treating every client as entirely separate may forgo useful risk sharing. The point is to make the commitment legible and authorized.

A global investment policy also encounters currency mismatch. Income earned elsewhere must purchase labour and materials where the building stands. Diversification across countries can reduce some concentration while introducing exchange-rate, tax and transfer risks. The simple euro model abstracts from these. A real mandate would match near-term liabilities to usable local liquidity and state who bears any remaining mismatch.

The practical legal comparisons below identify limits on transplanting the arrangement. They do not constitute an opinion that any proposed structure is executable without qualified local review.

In Romania, Law 196/2018 directs income from common property, including bank interest, to the association's repair fund and requires annual repair-fund provision. It also addresses separate administration and transfer of records when managers change (Law 196/2018 2018, arts. 66, 69–71). This supplies a relevant commitment structure. It does not turn separately titled apartments retained by a developer into common property, or automatically dedicate their rents to the association. That transfer of value requires its own legal mechanism.

New York City illustrates how the obligation itself can change. Local Law 97 introduces emissions requirements, with different treatment for categories of affordable and regulated housing (New York City Department of Housing Preservation and Development, n.d.). A fund concerned only with replacing components like for like may miss required adaptation. This example should not

be mistaken for a statement that every condominium faces the same reserve rule or compliance route.

For a co-operative structure in Maharashtra, section 70 of the Co-operative Societies Act specifies investment and deposit channels and routes dependent on rules or government orders (Maharashtra Co-Operative Societies Act 1960, § 70). The model's diversified financial portfolio cannot simply be assigned to a Mumbai housing society without establishing the applicable permissions. Entity classification and current housing-specific provisions matter; another Indian state's regime is not interchangeable with this one.

Shanghai's housing administration describes, in its 2024 response on special maintenance funds, procedures for authorized expenditure and audits, and the use of deposits and government-bond routes for fund income (Shanghai Municipal Housing Administration 2024, secs. I–III). This is evidence of a specific, administered renewal-fund system. It is not permission to replace that system with an unrestricted global investment account. The dated response also cannot settle every subsequent rule change.

Kenya's Sectional Properties Act combines duties to maintain common property with funding obligations. It restricts the corporation's trading powers and conditions investment of money not immediately required on trustee-permitted investments and a special resolution (Sectional Properties Act 2020, §§ 20, 21 and 35). A Nairobi rental endowment would therefore need an entity and contractual arrangement whose powers actually cover the proposed activity. The condominium corporation should not be presumed capable of any business that might generate useful income.

These differences favour a company that can refuse or narrow a mandate. It must be able to say that a particular client lacks the title, capital, investment powers or contribution authority needed for the advertised service. Global scale is valuable only if it sustains the expertise to recognize such limits. A uniform sales promise would defeat that purpose.

Paying for continuity

The steward needs a viable business model of its own. Its fee cannot remain outside the client's renewal calculation, and the client's investment performance should not be used to obscure the cost of administration.

A simple example makes the scale problem visible. With an annual fee of EUR 15,000, direct service cost of EUR 9,000 per client and central annual costs of EUR 3 million, the operating break-even point is 500 clients. These are hypothetical costs, not a business valuation. Onboarding, working capital, unusual investigations and liability exposure could increase the requirement.

The calculation explains why a company might seek growth; it does not justify using client capital to finance that growth. Equity and other lawful financing of the manager should be identified separately from assets held for renewal. A related development financed from client reserves would bring credit risk and conflicts into the very provision meant to remain available for repairs.

Fees based entirely on assets under management can reward accumulation even when work should proceed. Fees based entirely on project expenditure can reward unnecessary works. A fixed service fee with disclosed charges for genuinely additional work is easier to inspect, though it still requires controls on scope and quality. The contract should identify which ordinary tasks are included, which events justify an additional charge, and who approves it.

No remuneration formula eliminates the need for judgment. An independent review might find that a proposed replacement should be postponed, while another might find that postponement has been used to make reserves look strong. Useful performance measures would therefore combine timeliness, condition, forecast accuracy, procurement outcomes and the handling of complaints. Fund growth alone is a poor substitute.

Affordability also needs a separate account. Dedicating rent to common renewal can protect a building while leaving tenants unable to afford it. In the retained-apartment example, renters may help finance common assets whose value accrues partly to owner-occupiers. The distribution might be accepted, offset through rent policy, or changed through beneficiary rights. Its fairness cannot be inferred from the account's solvency.

Likewise, reducing owner assessments is not necessarily an increase in collective wealth. Some of the benefit may enter sale prices. A project should disclose who contributes capital at launch, who makes later payments, who receives the service, and who can capture the value of the protected arrangement on exit. Without that account, "self-financing" can become a description of whose payment has been made less visible.

Failure, adaptation and exit

A stewardship mandate should describe failure before describing perpetuity. If funding falls short, there must be an ordered response: identify urgent safety obligations, preserve usable liquidity, disclose the gap, and obtain a lawful decision on contributions, asset changes or service changes. Investment risk should not be increased automatically to chase the return required by an underfunded promise.

Manager failure is different from client underfunding. In the first case, separate custody and portable records should permit a successor to take over without treating the client assets as working capital of the failed company. In the second, replacing a manager may improve administration but cannot supply missing economic resources. Neither arrangement can contract away applicable creditor priorities, residents' rights or statutory duties.

Asset disposal also needs a distinction between means and purpose. Selling one rental apartment to avoid a dangerous delay may serve renewal better than preserving every original asset. Repeated sales can nevertheless exhaust the income base. The model makes that consequence visible by reducing subsequent rent after each sale. A mandate should require a revised continuation assessment whenever a material asset is sold.

Adaptation is harder than replacement. A building may need different access, lower energy demand, a new use or a different relationship to its surroundings. The beneficiaries of the original endowment may disagree about those changes. A durable arrangement therefore needs a procedure for revising purposes, involving affected residents and competent public authorities where required, while preserving the dedication of value as far as law and circumstances permit.

Environmental claims need their own comparison. Retaining an old component, replacing it with a more efficient one, or redeveloping the site can have different embodied and operating consequences. A well-funded renewal system can finance environmentally poor decisions just as readily as good ones if its mandate asks only for financial continuity. Engineering assessment, environmental assessment and resident consent should meet in an explicit decision rather than be collapsed into one financial indicator.

An initial implementation would be judged best through a bounded pilot: a small number of buildings with established title, independently assessed liabilities, disclosed capital, and a contractual route to change the manager. The pilot would test records, inspections, decision timing, resident access and actual costs. It would not establish perpetual solvency, but it could expose the administrative failures that a long projection leaves abstract.

The financing model supports a conditional proposition. A development can dedicate part of its value to continued service, provided that the commitment survives an honest opportunity-cost calculation and a dated funding test. The institutional proposal supports another: specialist administration can be designed to persist without giving one company permanent control. Whether such a company earns its fee depends on the work performed, the gaps disclosed and the decisions it helps clients make.

At the end of the first funding window, the building will still have owners, occupants and components of different ages. A successful arrangement should leave them more than a fund balance. It should leave funded obligations, records they can use, and someone they can replace if the work is not being done.

Model record

The accompanying implementation publishes the input assumptions, annual ledgers, intervention histories, fixed stress paths and unit tests. The continuation calculation discounts future net costs at the relevant treatment's assumed real return and takes the largest cumulative deficit within the rolling window. It is a conditional liquidity requirement, not an actuarial reserve or an infinite-horizon solvency proof.

The no-call treatments are deliberately hard boundaries: once obligations become unpaid, the subsequent ledger records the shortfall rather than assuming an undisclosed rescue. Authorized calls and apartment liquidation are separate policies. Additional calls are also reported at present value, using the common 2% real comparison rate. There is no random simulation from which a success probability could legitimately be estimated.

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