

Article

Dashboards Without Dwellings: Big Data, Real-Time Interfaces, and the Tokenisation of Housing in the Chilean Smart City

José Francisco Vergara-Perucich 

Núcleo de Investigación Centro de Producción del Espacio (CPE), Facultad de Arquitectura, Animación, Diseño y Construcción, Universidad de Las Américas, Santiago 8320000, Chile; jvergara@udla.cl

Abstract

Housing tokenisation usually reaches the public as a story about technological innovation. The account offered here starts elsewhere, from its legal form and its data architecture, and situates the phenomenon among the infrastructures of the smart city. Chilean evidence gathered between 2022 and 2026 points to a specific conclusion about what actually changes hands. The object that circulates as a housing token is a contractual claim on the income a dwelling can generate, and neither the building nor any real right over it moves with the token; for retail buyers, that claim is dressed in the language of a real-time investment dashboard. Because Chile's registry regime still runs on nineteenth-century demands of solemnity and inscription, title cannot be tokenised at all. The workaround adopted by industry actors is to lodge legal ownership inside a special-purpose vehicle and peel off the economic rights, which then circulate as fractions priced through internal rates of return (IRRs). How that interface presents investment opportunities to prospective retail buyers was examined through a headless-browser extraction of the public marketplace of Reity, a Chilean platform seeking registration under the Fintec Law. The procedure converted a JavaScript-rendered single-page application into a structured cross-sectional dataset of the 35 listings active on 31 August 2026 with complete financial fields. Two findings stand out. Across the 29 listings that report both metrics, the advertised internal rate of return exceeds the displayed current yield (actualised Cap Rate) by a mean of 7.70 percentage points, a gap between a prospective metric and a current-performance metric that the interface places side by side. In addition, 32 of 35 listings carry a '100% funded' label while offering tokens; on all of them, the card switches from 'tokens available' to 'tokens for sale' and departs from the CLP 100,000 issue price, signals consistent with resale by existing holders that the interface leaves unexplained. Three moments organise the argument that follows, namely, speculation, fiction, and dematerialisation. The dataset, codebook and extraction code are openly released.



Academic Editors: Diego Gabriel Rossit and Pedro Moreno-Bernal

Received: 2 September 2026

Revised: 28 September 2026

Accepted: 30 September 2026

Published: 3 October 2026

Copyright: © 2026 by the author.

Licensee MDPI, Basel, Switzerland.

This article is an open access article distributed under the terms and conditions of the [Creative Commons Attribution \(CC BY\)](https://creativecommons.org/licenses/by/4.0/) license.

Keywords: smart cities; big data; real-time information; information architecture; digital platforms; web scraping; housing financialisation; tokenisation; Chile; fictitious capital

1. Introduction

An average home in a Chilean city cost around 3800 Unidades de Fomento (UF) by the middle of 2026. Take a conventional mortgage with a twenty percent down payment and the monthly repayment lands near CLP 650,000, set against median labour earnings of CLP 757,752 [1,2]. Servicing that loan swallows upwards of eighty-five percent of a typical wage. There is nothing concealed about the sum, since the real estate industry publishes these very figures itself.

What developers and financiers make of that sum is the question driving this study. Owning a whole apartment now sits out of range for households on the median wage, and yet the same sector hands them fractional claims on rental yields for as little as CLP 100,000 [3–5]. Shut out of the market as buyers, families walk back into it as small-scale investors. The flat stays unaffordable while a slice of someone else's rent remains perfectly purchasable. Democratisation is the word the industry attaches to this move.

Scholarship on digital real estate has grown quickly, though its empirical weight still clusters in the North Atlantic. Legal analyses have already settled one point, which is that these instruments hand over no real ownership [6]. From the quantitative-finance side, studies track fragmented micro-investment in low-cost US rental stock [7] and report the fastest growth where valuations are depressed, demand is weak, and lending is constrained [8]. An agent-based simulation of the Swedish market suggests that swapping conveyancing for smart contracts would lift transaction activity and price volatility in tandem, so the efficiency gain shows up with a less stable market bolted onto it [9]. Geographers cast the same trend as reintermediation in a new guise [10,11], a fresh layer of intermediaries that channels capital towards those who already hold it and reproduces racialised structures of ownership [12]. Latin America hardly registers in any of this. One recent exception looked at the promotional discourse of Chilean platforms and turned up narratives of liquidity and democratisation that said nothing about speculative risk [13]. Where that work read what the platforms say, the present study measures what their interfaces display. Setting civil-law jurisdictions aside matters, since property regimes shift the meaning that fractional ownership can carry in the first place.

A parallel literature has grown up around smart urbanism, and the two debates have stayed oddly disconnected. Critical work shows that real-time dashboards and urban indicators help govern the city by settling which conditions become visible and which slip out of view [14–16]. Studies of datafication push the point into political economy and treat urban data as an asset class generated through accumulation [17,18]. A more hopeful strand argues that distributed ledgers and behavioural design might be turned towards participatory urban finance, provided citizen participation outweighs capital concentration [19]; research on smart waste governance goes further, showing digital systems that reorganise how governance actors decide instead of merely feeding them information [20]. Housing tokenisation lands exactly on the seam between these bodies of work, and yet neither has examined it closely. For the investor, the instrument arrives as an interface, a marketplace card that the platform presents as live and that compresses a building, its tenants and its legal structure into a handful of fields. Read as data infrastructure instead of as a financial product, tokenisation becomes something an empirical study can actually get hold of.

Four features make Chile a particularly strategic case. Law 21.521 [21] regulates fintech real estate assets head-on. Its property regime is Napoleonic, so transfer of title runs through a public deed and then registration at the Conservador de Bienes Raíces, with unregistered bearer instruments left out. The Unidad de Fomento has pegged contracts to inflation since 1967. On top of that, Chilean housing counts among the most financialised in Latin America [22,23].

The central claim advanced here is that the fractionalisation of Chilean housing works by going around the physical asset; what gets digitised is the income it throws off, while the dwelling stays where it is. Fractional title has no way through the registry, so market actors have engineered a structural split. Legal ownership stays lodged in a special-purpose vehicle, while the financial entitlements attached to it are detached and sent circulating through digital platforms. The empirical component focuses on the retail interface through which this split reaches prospective investors, and it is organised around three questions:

Through which legal and contractual arrangements do Chilean platforms separate title from income (RQ1)? Which financial, spatial and legal attributes does the marketplace render as investable metrics, and which remain outside the display (RQ2)? What do the displayed metrics communicate about returns, funding and availability, and where do they remain ambiguous (RQ3)? RQ1 is addressed through documentary and legal analysis; RQ2 and RQ3 are addressed through a reproducible extraction of one platform's marketplace at a single date, released as an open dataset. The study observes the offer as it is presented; investors, transactions and trading dynamics lie outside its data. The analysis then moves through three moments, namely, speculation, fiction, and dematerialisation.

2. Housing as Asset, Dwelling as Abstraction

2.1. Financialisation and the Fractional Claim

Residential property has been steadily recast as a vehicle for accumulating wealth, and that shift sits at the heart of housing financialisation [24]. Farha [25] tracks how housing's social purpose gets pushed aside in the process. Later work follows the same logic into digital property management and portfolio selection. Fields [26] names the resulting formation the automated landlord, a wealth-building strategy in which algorithms take over the labour of coordination.

Most of this scholarship pitches its analysis at the institutional scale, looking at the mortgage-backed security, the listed landlord, or the private equity fund. Rolnik [27] shows how the worldwide promotion of homeownership turned housing rights into credit relations, and Christophers [28] sets that conversion within a broader settlement where income flows to the control of assets more than to production. Fractional tokens carry the settlement downward. Built for households that cannot buy, the instrument invites them to hold a claim on the income of a dwelling they will never live in. Getting into homeownership has long been read as a threshold shaped by savings capacity, family transfers, and labour-market position [29]. Tokenisation leaves that threshold untouched and sets a second one alongside it, priced at CLP 100,000 and denominated in a different currency of success. Holdings scattered this way are hard to see too. Recent efforts to estimate income and wealth together inside the national accounts [30] lean on household surveys and balance-sheet aggregates, and micro-shareholdings held through platform intermediaries surface in neither the housing statistics nor the usual registers of financial wealth.

2.2. Tokenisation Between Promise and Evidence

The empirical literature on tokenised property is sparse and recent, and it pulls in different directions. Swinkels [7] records genuine retail participation in low-value US rental assets, together with thin secondary trading. Cornelli [8] locates the strongest growth in weak markets and treats tokenisation as filling gaps that conventional finance leaves open. Moringiello and Odinet [6] show that what the buyer legally receives is a contractual claim, whatever the marketing asserts, while an interest in the land itself never changes hands. Proskurovska and Morawski [9] model what national-scale adoption would bring and conclude that the cheerful generalisations about efficiency gains survive only under narrow assumptions, given that smart-contract conveyancing drives up turnover and volatility together.

Design-led research puts the same technical substrate to other uses. Wang and Jiang [31] sketch a platform where ownership itself is made fluid and traded continuously, so households can shift their housing position as needs and incomes move, with liquidity working in the service of inhabitation. Dorostkar [32] holds that tokenised collective rights might underwrite housing cooperatives, commons governance, and anti-eviction contracts, so long as corporate issuers do not dictate the terms of implementation. Cran-

dall [12] asks who actually ends up with the equity once it is split into fractions and finds concentration reappearing under the retail label. Taken together, these studies suggest the ledger settles nothing on its own. What separates a cooperative share from a rent token is the property relation encoded in the fraction, and whoever designs the contract writes that relation.

One claim keeps surfacing in both the promotional and academic literature and deserves its own treatment: the claim that fractionalisation supplies liquidity. Swinkels [7] finds ownership genuinely spread among small holders even as secondary trading stays thin, which leaves the capacity to exit far weaker than the capacity to enter. Proskurovska and Birch [11] explain why that asymmetry is built in and not a passing phase. A ledger can log a transfer with great efficiency, yet it cannot conjure a counterparty, price an illiquid building, or govern the institutions on which valuation rests. Tokenisation shifts the settlement layer and leaves the market-making problem exactly as it found it. For the present study, the consequence is methodological. Once liquidity is understood as something buyers produce, and not the technology of transfer, what a marketplace shows about availability and funding turns into an object of analysis in its own right, and Section 6 treats it that way.

2.3. *Digital Instruments, Credit, and the Banking Margin*

The mechanism in Chile cannot be described without first pinning down the object. Kochergin and Andryushin [33] set digital assets apart from crypto-assets and digital currencies, and they mark off virtual currencies, which do the work of payment and savings, from digital tokens, which serve investment or utility ends. Chilean housing fractions fall squarely into the second class. An identifiable party issues them, they come with an expected return, and money is neither their design nor their use. Evidence on commercial transactions in cryptocurrencies shows why the distinction holds up in practice, since settling ordinary sales in crypto stays operationally awkward for sellers and buyers alike [34]. The Chilean platforms therefore keep pesos and UF on the payment rails and hand the blockchain the narrower job of registration.

A second body of work clarifies what the instrument does to credit. Debates on central bank digital currency ask how far a digital claim held directly by households erodes the intermediating role of commercial banks, an effect that turns on access, remuneration, and the technology of issuance [35–37]. Housing tokenisation reproduces a smaller version of that displacement from the private side because the household channels capital straight to a developer with no bank sitting in between. Whether that is a good thing hangs on where the credit ends up. Working with 417 banks across 46 countries, Andries, Ongena, and Sprincean [38] find that lending to households and to non-tradable sectors tracks system-wide distress, whereas credit extended to tradable production does not. Where retail funding finances construction, it moves credit in the direction this evidence associates with fragility, outside the prudential perimeter that supervises bank exposures.

2.4. *Abstract Space, Fictitious Capital, and the Interface*

Tokenisation sits within this trajectory [10,12]. What has to be done here is to spell out how the mechanism operates under civil law. That work draws first on two theoretical instruments, and then on a third that takes up the role of the interface.

The first is Lefebvre's abstract space [39]. Brought into being through the joint action of capital and the state, abstract space favours exchange value as it homogenises, fragments, and hierarchises. Tokenisation hands these operations an unusually literal shape, since carving one dwelling into digital shares does all three at once. What the buyer meets is the

property rendered as a conceptual representation of space built for investment. Here, the conceptual metaphor has become part of the product's architecture.

The second instrument is fictitious capital. Reading Marx, Harvey [40] describes claims on future income that circulate as though they were present-day assets. Digital instruments stretch the chain out further. A token grants a right set by a contract; the contract specifies payments owed by an entity; the entity holds the legal deed. The logic of that chain stays the same throughout, and what shifts is the scale at which it can be split.

Those first two concepts leave one question open: Why does the claim come to feel credible to a retail user? The interface is what does that job. Urban dashboards borrow the visual grammar of the control room, where live indicators make a chosen set of variables look comprehensive [15,16]. Measurement draws the boundary of attention. Anything the dashboard leaves out grows hard to think about within the terms the display has set. On tokenisation marketplaces, the fields on show are yield, funding progress, and token availability. In the marketplace examined here, occupancy, arrears, building age and tenant income do not appear as fields on the listing card (Table 1). The dashboard is thus the place where abstract space acquires an interface, and where fictitious capital turns into an object that can be tapped, compared, and bought.

For empirical purposes, the dashboard critique [14–16] yields three observable properties of a marketplace interface: Selection concerns which attributes of a dwelling appear as fields at all. Hierarchy concerns which fields are shown by default on the listing card and which only after expansion or on a secondary page. Temporality concerns which fields are presented as live status signals, such as funding progress and availability. Section 3 translates these properties into the variables and the interface audit analysed in Sections 5–7.

Experimental evidence from other settings suggests the medium itself reshapes conduct. Stivers and colleagues [41] report that participants take on markedly more risk when the same stake is denominated in digital coins instead of cash, with the house-money effect surfacing under digital media as the break-even effect drops away. Lower moneyiness loosens the discipline a household brings to its own savings. Studies of user acceptance in blockchain and metaverse commerce run in the same direction, tracing perceived usefulness to compatibility, enjoyment, and trust, while any judgement of the underlying asset barely enters [42]. A display that turns a building into a progress bar and a percentage is, on this evidence, anything but a neutral instrument of information.

These concepts also throw light on a precondition peculiar to Chile. The Unidad de Fomento, brought in during 1967, split the unit of account used in contracts away from the national peso. A household borrows under one monetary standard and draws its wages under another. Digital real estate instruments take this arrangement over and repackage it as a selling point, shown straight on the platform dashboards.

Table 1. Data dictionary and interface audit of Reity listing card.

Variable/Attribute	Literal Label	Where It Is Displayed	Type	Observed/Derived	Valid (n)	Permissible Inference	Impermissible Inference(s)
Asset type	Renta/Renta Garantizada/Desarrollo/Socio Preferente	Collapsed card	Categorical	Observed	35	Product category as labelled	Buyer profile; contract terms
Location	commune +Santiago	Collapsed card	Categorical	Observed	35	Listing geography	Capital flows; investor preference
Advertised IRR	‘TIR’ ($\pm$ UF)	Collapsed card (first return field)	Numeric %	Observed	35	Projected return as displayed	Realised returns
Actualised Cap Rate	‘Cap Rate’	Collapsed + expanded	Numeric %	Observed	35 (29 rental-based; 6 fixed construction-debt yields)	Current yield as displayed	Total return; overpricing
Funded status	‘% financiado’	Collapsed + expanded	Numeric %	Observed	35	Funding label as displayed	Capital actually subscribed
Tokens available	‘tokens disponibles’ (funded < 100%)/‘tokens en venta’ (funded = 100%)	Collapsed + expanded	Count	Observed	35	Wording separates pre- and post-funding offers	Seller identity, time on offer, executed trades, whether post-funding offers are resale or later issuance
Risk rating	‘Riesgo’	Collapsed + expanded	Categorical	Observed	35	Platform’s own risk label	Rating methodology, realised losses
Term	‘X años para su término’	Collapsed + expanded	Ordinal	Observed	35	Investment horizon as displayed	Actual holding period
Token price	‘Desde \$X/token’	Collapsed + expanded	CLP	Observed	35	Price as displayed	Execution price

Table 1. Cont.

Variable/Attribute	Literal Label	Where It Is Displayed	Type	Observed/Derived	Valid (n)	Permissible Inference	Impermissible Inference(s)
Unlabelled integer	(none)	Next to asset type	Integer	Observed	35	Presence of an undocumented field	Its referent (units, tranches, holders or other)
Lease type	‘Arriendo tradicional’/‘Arriendo garantizado por la inmobiliaria’/‘Opcionalmente, arriendo garantizado por la inmobiliaria’	Expanded card	Categorical	Observed	29	Lease type as stated	Actual contract terms
Occupancy	—	Absent	—	—	0	—	Whether units are leased or vacant
Arrears	—	Absent	—	—	0	—	Payment default
Building age	—	Absent	—	—	0	—	Condition/depreciation
Tenant income	—	Absent	—	—	0	—	Tenant income profile
Holdings distribution	—	Absent	—	—	0	—	Concentration of holders
Subscription volume	—	Absent	—	—	0	—	Capital raised

3. Case, Corpus, and Method

This study combines documentary and legal analysis with an original cross-sectional dataset extracted from a retail marketplace (Figure 1). The documentary strand, covering November 2022 to August 2026, establishes the legal and contractual object that the token represents (RQ1). The dataset strand characterises how that object is rendered as a set of investable metrics on the platform’s interface (RQ2, RQ3). The two strands are integrated in Sections 5–7 and summarised in a joint display at the opening of Section 8, where each finding is traced to its source and to the scope of interpretation it supports.

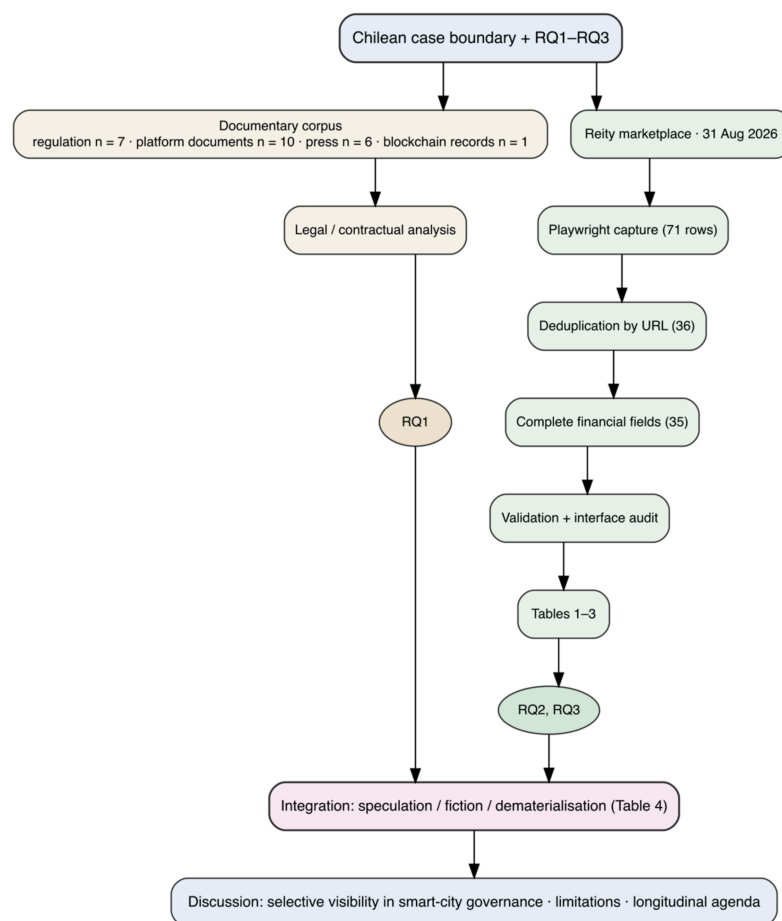


Figure 1. The research design: the documentary/legal strand, the marketplace-dataset strand, and their integration.

3.1. Qualitative Corpus

Four groups make up the qualitative material. The first gathers regulatory instruments, among them Ley N° 21.521 [21], Norma de Carácter General N° 502, Ley N° 18.045 [43], and CMF guidance [44–46]. The second holds platform documents, including Reity’s regulatory filings and terms of service alongside Fraccional.cl’s articles on corporate reorganisation [3,47–50]. Industry journalism makes up the third group. Blockchain evidence pulled from the Algorand public explorer [51] forms the fourth. Throughout, corporate communications are read as spatial representations and cross-checked against the relevant statutory sources. Documents were collected between November 2022 and August 2026. Inclusion required that a document either define the legal form of the instrument, describe the platform’s product or contract terms, or record an issuance. The final corpus comprises 7 regulatory instruments, 10 platform documents, 6 press items and 1 blockchain record. Claims made in corporate communications were retained as evidence of how platforms

present the instrument and were checked against statutory sources before being treated as descriptions of its legal form.

3.2. Web Scraping and Automated Data Extraction

Marketplace data were collected on 31 August 2026 to document how the platform presents tokenised housing to prospective retail investors. Reity was selected because it operates a public marketplace accessible without authentication, lists tokenised housing assets while seeking registration under Chile's Fintec Law (NCG 502) [3,52], and displays comparable financial metrics on each listing card—the three conditions required for a reproducible single-date extraction. Fraccional and other platforms enter the study through the documentary corpus only because their public listings do not display the same set of per-card metrics (IRR, Cap Rate, funded status and token availability) extracted from Reity. Most contemporary fintech marketplaces are single-page applications (SPAs), which means their asset data are rendered through JavaScript once the page has loaded. Ordinary HTML scraping consequently misses the very metrics that users see.

Playwright, an automated headless browser, was used to move through the Reity.cl marketplace, clear the initial loading sequence, and capture the raw interface text tied to every listing. Python 3.14's pandas library and Regular Expressions (Regex) then parsed that unstructured dashboard text into discrete quantitative variables:

- **Asset Type:** The asset type represents the product category as labelled by the platform (Renta/Renta Garantizada/Desarrollo/Socio Preferente).
- **Location:** The location variable represents the commune displayed for the underlying asset.
- **Advertised IRR:** The advertised IRR is the projected internal rate of return displayed under the label 'TIR', recorded together with its denomination ('UF + X%' where the card is inflation-indexed, a percentage displayed without the 'UF + ' prefix).
- **Actualised Cap Rate:** The actualised Cap Rate represents the current yield displayed under the label 'Cap Rate'; the value is reported by the platform and was not computed by the author.
- **Funded Status:** The funded status is the percentage displayed under the label '% financiado', recorded as displayed.
- **Tokens Available:** Tokens available represents the number of tokens displayed as available for purchase ('tokens disponibles'/'tokens en venta') at the snapshot date. The extraction does not identify whether these units originate in primary issuance, resale by existing holders or subsequent issuance.
- **Risk Rating:** The risk rating is the category shown under the label 'Riesgo'.
- **Term:** This variable represents the horizon shown as 'X años para su término'.
- **Token Price:** The token price is the price shown as 'Desde \$X/token'.
- **Unlabelled Integer:** An unlabelled integer is an integer displayed next to the asset type with no literal label on the card and no accompanying legend. Its referent could not be established from the interface or from the platform's public documentation. It is not used in any analysis and is retained in the released dataset and codebook as a documented instance of an undocumented interface element; Section 8.1 returns to it.
- **Product Description (expanded view):** The product description is the text stating the lease type ('Arriendo tradicional'/'Arriendo garantizado por la inmobiliaria').

The scraper caught each listing card twice: once collapsed and once after expansion. That left a raw extraction of 71 rows. Deduplication kept the first occurrence of each unique property URL and brought the count to 36 listings. Of those, 35 carried the full set of financial fields and make up the analytical sample. The unit of analysis is the listing card as observed at the snapshot date. Several listings correspond to units in the same building or

to tranches of the same project (20 distinct buildings or projects), so the dataset describes the platform’s offer and should not be read as a population of buildings, investors or transactions. Because the extraction captured every listing active on the marketplace at that date, the dataset constitutes a cross-sectional census of the platform’s offer on 31 August 2026, and it is not a probability sample of the Chilean market. These eleven fields are the complete set displayed on the collapsed and expanded card; the analysis centres on the six financial and locational fields, and the remaining five are included in the released dataset and codebook. Fields shown only on individual asset pages were not extracted systematically; Table 1 records, for each attribute discussed in the article, whether it is displayed, where, and what it allows the analysis to infer. Two of the 35 listings (IDs 85 and 86) are commercial premises (‘Locales Comerciales’); they are retained because the platform lists them in the same marketplace and product categories as apartments, and results are reported with and without them where relevant. Figure 2 reconstructs the card from the captured text.

Listing card reconstructed from captured text (ID 51)

COLLAPSED (default)	EXPANDED (after click)
1. Rent 217 2. Borde Vivo Building, Apt 510, Santiago Centro, Santiago 3 years to term 3. IRR 12.4% 4. Cap Rate 3.37% Risk: Very conservative 5. 100% funded 6. 25 tokens for sale From \$100,346 / token Invest	1. 217 Traditional property lease. Generally 1+ year contracts. 2. Borde Vivo Building 3 years to term From \$100,346 / token 5. 100% funded 6. 25 tokens for sale 3. IRR 12.4% 4. Cap Rate 3.37% Risk: Very conservative

1. Asset Type (+ unlabelled integer) 2. Location (commune in collapsed view only) 3. Advertised IRR 4. Actualised Cap Rate 5. Funded Status 6. Tokens Available
Other captured fields: Risk Rating, Term, Token Price; the expanded view adds the product description (lease type).

Figure 2. The listing card reconstructed from captured text (ID 51), with the six extracted fields numbered in both views. The schematic reconstruction is from the extracted text; the layout and typography of the original interface are not reproduced.

3.3. Data Validation, Limitations and Reuse

Validation ran through three stages. First, deduplication by property URL stripped out the paired collapsed and expanded captures. Second, Regex-parsed fields were checked by hand against rendered marketplace cards for a random subset of 10 listings (of 35) and, where available, against the platform’s individual asset pages. Third, any missing field was logged as missing and never as zero. The Cap Rate is the one deliberate exception, as the platform displays 0.00% for listings without reported current rental income, which makes zero a substantively meaningful observation.

Four limitations bear on reuse. The pipeline captures one platform at a single moment, so no time series can be inferred from it. It records what the interface displays, and the

underlying contracts may carry different or additional terms. It contains no information on investors, subscription volumes, trades or time on offer, so claims about investor behaviour, market liquidity or aggregate exposure fall outside what the data can support; where the article discusses them, it does so as interpretation grounded in the documentary corpus and the comparative literature and marks them as such. Finally, because the marketplace is a client-rendered single-page application, any change to the DOM structure or displayed copy will require revisions to the parsing layer. Both the extraction script and the structured dataset are released so these constraints stay open to inspection. Table 2 sets out a representative subset of the resulting variables.

Table 2. Extracted dashboard metrics from tokenised housing platform (selected listings, 31 August 2026).

ID	Property	Location	Asset Type	Denomination	Advertised IRR	Actual Cap Rate	Funded Status	Available Tokens
14	Edificio Domeyko Depto 217	Santiago Centro	Renta	CLP	15.20%	0.00%	100%	71
12	Edificio Domeyko Depto 715	Santiago Centro	Renta	CLP	15.20%	0.00%	100%	121
85	Locales Comerciales Irarrázaval	Nuñoa	Renta	UF	8.87% (UF)	5.33% (UF)	23%	4718
68	Proyecto San Francisco (1 de 5)	Santiago Centro	Socio Preferente	UF	8.30% (UF) *	8.00% (UF) *	100%	6
86	Locales Comerciales Curicó	Santiago Centro	Renta Garantizada	UF	8.37% (UF)	9.00% (UF)	76%	2744

* Socio Preferente assets carry a fixed construction-debt yield (8.0–8.1% UF) shown under the ‘Cap Rate’ label, not a rental yield. Denomination indicates the unit in which the return is labelled on the card: ‘UF’ for inflation-indexed returns and ‘CLP’ for a percentage displayed without the ‘UF +’ prefix.

4. Registry Friction and Engineering the Divide

Chilean real estate law throws up a direct barrier to bringing digital assets in. Ownership passes only through a notarised public deed and its registration at the Conservador [47]. By a different legal route, this arrives at the same place as Moringiello and Odinet [6] because Chilean conveyancing rests on solemn execution, a formality that resists automation. Within such a system, a digital coin can never stand in for a deed.

Developers have worked around that constraint through organisational design. A special-purpose vehicle buys the property and registers the title, and the economic entitlements are then split into digital shares [47,48]. Earlier platforms leaned on the sociedad por acciones form. Its administrative burdens soon became the practical bottleneck, including notarial costs and the tax disputes tied to Declaration 1949 [49]. Newer models stripped out the corporate layer and turned to standardised adhesion contracts backed by ring-fenced patrimonies [49,50]. Innovation thus clustered around the corporate registry, and the historic land registry was left untouched. What comes out the far end of this engineering is a digital token in the strict investment sense that Kochergin and Andryushin [33] identify—an entitlement to a stream of payments, issued by a named party, carrying no monetary function and no attachment to the land.

Financial regulation grew up along the same boundary. Under Ley N° 18.045, a digital asset conveying equity or debt counts as a security [44,53]. NCG 502 then set up the

Registro de Prestadores de Servicios Financieros [3,46,52]. These rules define and protect the investor and regulate the financial instrument, and yet the people living in the digitised properties never enter their field of concern. Tax treatment rounds the arrangement off, as the SII automatically reads a tenant's rent payment as a dividend received by a micro-shareholder [54,55]. Rentier status thereby takes on an administrative form within reach of anyone holding a national ID and CLP 100,000.

5. Speculation: Forging the Micro-Landlord

The platform's financial products come in four kinds: Rent tokens attach to completed units. Guaranteed-rent tokens attach to completed units with a guaranteed rental income. Development tokens rest on sale promises for off-plan projects [47,56]. Preferred Partner tokens work as mezzanine debt [47,57]. A right of habitation comes with none of them. Together, though, they cover the developer's whole funding stack (Table 3). Platform operators present these instruments as a response to tighter construction credit [50].

Table 3. Descriptive statistics by asset type (31 August 2026).

Asset Type	Listings (n)	Buildings/ Projects (n)	IRR Mean (Median)	Cap Rate Mean (Median)	% '100% Financiado'	Tokens Available (Median)
Rent	18	12	12.74 (12.45)	2.84 (3.24)	89%	36
Guaranteed Rent	9	6	11.32 (11.30)	7.29 (7.21)	89%	29
Development	2	1	11.37 (11.37)	7.02 (7.02)	100%	20
Preferred Partner	6	2	8.32 (8.30)	8.02 (8.00) *	100%	6

* Preferred Partner listings display a fixed UF yield (8.0–8.1%) under the 'Cap Rate' label; it is a construction-debt return, not a rental yield.

5.1. Empirical Evidence of the Capital Stack

The scraped marketplace data bring this capital-stack function into view. Inside the 'Asset Type' variable, 17% of active listings were tagged as Socio Preferente (Preferred Partner). The platform's own scraped metadata calls these instruments, in plain terms, a way of 'financing the construction' (author's translation) of named developments in exchange for fixed UF yields. Six listings, five tranches of Proyecto San Francisco and one of Proyecto Domeyko, display under the 'TIR' label a fixed return of 'UF + 8.3%' or 'UF + 8.41%' and a Cap Rate of 8.0–8.1% in UF. The accompanying platform copy asks users to 'be part of the start of a real estate project by financing the construction' (author's translation). These observations document the presence of retail-facing construction-finance instruments in the platform's product mix: six of 35 active listings, tied to two projects, offer a fixed UF-indexed return in exchange for funding construction. The snapshot records neither the capital raised through these instruments nor the number or profile of subscribers nor their share in each project's financing. It therefore cannot establish whether, or to what extent, retail funding substitutes for bank or mezzanine construction credit.

The comparative literature indicates why this configuration merits monitoring. Cross-country evidence associates credit to non-tradable sectors, real estate included, with system-wide distress [38], and debates on digital-currency disintermediation examine what follows when household claims bypass bank balance sheets [35,36]. When a bank finances construction, the exposure sits on a supervised balance sheet subject to capital requirements; when retail subscribers finance it through a platform, a stalled development transfers the loss to their savings. Whether this channel reaches a scale relevant to financial stability is an empirical question that the present data cannot answer, and Section 8.3 includes it on the research agenda.

5.2. Listing Geography

At the listing level, the platform's offer is strongly concentrated. Of the 35 active listings, 27 (77%) are located in Santiago Centro, three (9%) in Estación Central, two each (6%) in Ñuñoa and La Florida, and one (3%) in San Miguel. Measured by distinct buildings or projects, the Santiago Centro share is 70% (14 of 20). These shares describe where the platform lists tokenised units; they do not measure where retail capital has been invested, which would require subscription volumes. The pattern is consistent with the international finding that tokenisation grows where values are depressed and credit is tight [8], and with rent-gap readings of Santiago's central belt [58]; testing either link would require price and capital-flow data that the snapshot does not contain.

A plain paradox holds the product up, since housing unaffordability is what supplies the conditions for its appeal. The same UF measure that drives mortgage repayments beyond the reach of salaried households also sharpens the pull of indexed digital yields, and it shifts the inflationary burden onto tenants where leases are UF-denominated.

5.3. Speculative Reason and the Excluded Buyer

That paradox connects with what Sajter and Kuzmić [59] call financial nihilism, a condition in which households facing housing inflation, mounting consumer debt, stagnant real pay and low sentiment turn towards short-horizon, attention-driven speculation. Read through this concept, the way the platform frames its product is compatible with such conditions. Its marketing draws on the vocabulary of prudence, with bricks, rent, inflation indexation and a supervised issuer, while the returns it advertises are projected returns that depend on assumptions the platform does not disclose in full, and exit depends on finding another buyer. This is an interpretation of how the offer is framed; this study does not observe the motives or behaviour of Chilean investors.

Contractually, retail subscribers join the developer's growth coalition on terms the developer sets. Studies of local growth coalitions noted long ago that non-capitalist interests join such alliances with token representation, admitted as participants yet given no matching share of the decision [60]. Reity's terms [61] and the contractual structure described in Section 4 provide no channel through which a holder can influence the timing of a sale, the choice of tenant or the level of rent that generates the yield.

6. Fiction: Possession Devoid of Legal Title

Platform copy addresses users as part owners of tangible property. Reity's terms wrap the promise in the language of 'democratización' in property investment [61]. The contracts underneath, though, parcel out the economic benefits tied to rental income. Fraccional states that a digital fraction may match zero corporate shares, zero physical deeds, or zero blockchain coins [49]. What the purchaser actually holds is the digital representation, while the physical object stays out of reach [6].

6.1. Ambiguous Signals of Funding and Availability

Cornelli [8] shows that repurchase arrangements can sustain liquidity during stress episodes. The funding and availability fields of this marketplace raise a prior question, namely, whether a prospective buyer can tell from the display what kind of offer they face.

Median funded status stands at 100% (mean = 95.29%; SD = 17.00%). At the snapshot date, 32 of 35 listings (91%) displayed the label '100% financiado' together with units offered for purchase. The interface marks this situation in two ways. All 32 fully funded listings describe the units on offer as 'tokens en venta' (tokens for sale), whereas the three listings below 100% describe them as 'tokens disponibles' (tokens available); and the three partially funded listings are priced at exactly CLP 100,000 per token, while the 32 fully

funded listings display prices from CLP 97,231 to 111,500 (median $\approx$ CLP 103,600). This pattern is consistent with existing holders offering units on fully funded listings for resale at prices above or below issue; the platform's terms of use provide that acquired tokens may subsequently be sold to other investors [61]. The card does not say so, and the extraction records neither who is selling nor the time on offer nor whether trades are executed. The distinction between primary and secondary offers is thus encoded in a change of wording and in the token price and is left for the buyer to decode through a single 'buy' action. Whatever the origin, the contract attached to each unit carries no vote, no say over the timing of a sale and no right of habitation [61].

This ambiguity matters in light of the thin secondary trading documented for tokenised rentals elsewhere [7] and of the argument that ledgers settle transfers without creating counterparties [11]. If these units are resale offers, as their labels and prices suggest, the display presents a queue of sellers with the visual cues of a successful asset still selling and signals the difference only through wording and price, without explanation. Establishing whether these offers are resale, and whether and how quickly they clear, requires the longitudinal extraction of the availability, price and funded status per listing, which the pipeline developed here supports (Section 8.3), and Section 8.3 states the outcomes that would confirm or displace the resale reading.

6.2. Democratisation Without Decision

The vocabulary the platforms have taken up carries a long lineage in housing research. Arnstein [62] filed informing, consultation, and placation under tokenism on the grounds that each hands out the appearance of involvement while keeping back the capacity to decide. The evidence since has held steady. Public participation in Portuguese master plans works mostly as a conduit for individual private interests, and affordable housing barely comes up [63]. Residents' associations in London estate regeneration win real concessions only where they had organised beforehand and where a public authority stayed answerable to them [64]. Swedish redevelopment schemes summon place identity in ways that put sentiment where influence over investment decisions ought to be [65]. Reading participatory upgrading in Accra through Lukes's three faces of power, Azunre [66] shows how the very technique of participation can fix the boundary of what may be discussed.

Fractional ownership turns the terms of that critique upside down while keeping its structure intact. Nobody consults the tenant living in the digitised apartment. The micro-investor, by contrast, is consulted without pause, through the interface, on one question alone: whether to buy or not. Consultation of this kind is a market transaction and calling it democratisation lends a financial product the legitimacy that a political vocabulary spent decades building up. In Lefebvre's formulation [67], the right to the city runs through participation in the decisions that produce urban space and the appropriation of that space for use. A rent token delivers neither; for households priced out of ownership, it is presented as an accessible form of participation in urban property.

7. Dematerialisation: Reducing the Home to a Yield Stream

Fraccional's public communications suggest that, by July 2026, the platform had given up pricing units by square metre and shifted to valuing fractions solely through internal rate of return [68]. Square metres describe a building; IRR describes a cash flow. Change the unit of measurement and an apartment in Ñuñoa, a storage facility, and a mezzanine loan can all appear inside one category. Dematerialisation happens, then, within the metric itself. On the Reity marketplace, the IRR is likewise the first return metric shown on every listing card (Table 1). The Reity marketplace itself lists commercial premises next to apartments under the same 'Renta' categories.

Architectural theory has come at this displacement from the opposite side. Damiani [69] describes a discipline whose object no longer stops at real-world materiality, as hybrid realities open spatial questions that the industrialised model of construction could never pose. On the marketplace, the parallel move is metrological instead of representational. The building stays put in concrete and steel, while the thing put up for sale is a projected cash flow made commensurable with any other. Wang and Jiang [31] imagine the fluidisation of ownership as a way to restore the value of housing as a home, with liquidity arranged around changing household needs. Chilean platforms keep the fluidity and throw out the inhabitation. Liquidity goes to the investor, and the tenant supplies the flow that makes that fluidity worth buying.

Projected Return and Current Yield on the Same Card

The advertised IRR and actualised Cap Rate measure different things. The IRR is a prospective, multi-period return whose value depends on assumptions about future income and exit value; the card displays the horizon ('años para su término') but not the income and exit-value assumptions. The Cap Rate displayed by the platform is a current-yield metric that relates the present rental income to the token price. A gap between the two is expected by construction, and its size is not treated here as an estimate of speculative overpricing. It is used descriptively as a measure of the distance between the prospective and current indicators displayed on the interface for the same listing.

Across the 29 listings reporting both metrics (the six Socio Preferente listings display a fixed construction-debt yield under the 'Cap Rate' label), the mean advertised IRR is 12.21% (SD = 1.63%) and the mean Cap Rate is 4.51% (SD = 2.56%). The mean within-listing gap is 7.70 percentage points (median = 7.51; IQR = 4.93), and the IRR exceeds the Cap Rate in 28 of 29 listings (Figure 3). The two listings in this subset whose returns are labelled in UF (IDs 85 and 86) are also its only commercial premises; excluding them widens the mean gap to 8.16 percentage points, and the single negative gap corresponds to one of them.

Because the dataset is a census of the listings active on one date, *p*-values do not quantify sampling uncertainty about that population. They are reported only as an auxiliary check on the consistency of the gap across listings: a paired *t*-test ($t(28) = 10.62$, $p < 0.001$; Cohen's $d = 1.97$) and a Wilcoxon signed-rank test ($Z = -4.68$, $p < 0.001$) point in the same direction. Since listings in the same building or project are not independent, the comparison was repeated with values averaged by building or project ($n = 18$), yielding a mean gap of 6.91 percentage points ($t(17) = 8.76$, $p < 0.001$). These results establish a large and consistent gap between two metrics displayed side by side in this snapshot; they say nothing about realised returns or about the Chilean market as a whole.

Two listings display a Cap Rate of 0.00%—units 217 and 715 of Edificio Domeyko—each with an IRR of 15.2%. Other units in the same building display low but positive yields (0.99% to 3.11%), which is consistent with an operating building in which these two units produced no rental income at the snapshot date; the data do not establish why. Both cards carry the platform's risk rating 'Muy conservador' (very conservative), shown on 28 of 35 listings; the remaining seven, including all six construction-finance listings, are rated 'Conservador', and no listing carries a higher-risk rating. The card thus places a double-digit projected return, a zero current yield and the platform's lowest risk rating on the same screen, without disclosing how the rating is assigned.

Blockchain registration rounds the arrangement off. At least one Reity issuance, the Socio Preferente asset 2229464160, is registered on the Algorand network as a standard asset [51], and press coverage reports the same procedure for others [70,71]. The same apartment therefore lives in two parallel registries, with the Conservador recording legal title in public while the blockchain records holders of income claims in private. Lefebvre's

triad surfaces in this division. Homogenisation turns dwellings into interchangeable UF-denominated flows; fragmentation splits the asset by function; hierarchisation channels money from rent-paying tenants to dispersed micro-owners. Tenants appear in no field of the listing card (Table 1); they enter the product only indirectly, through the rental income that the Cap Rate summarises and through the ‘guaranteed rent’ category that insures investors against its absence. Dematerialisation writes the household out of the description of the asset.

Advertised IRR and Actualised Cap Rate per listing (n = 29)

Ordered by within-listing gap (IRR – Cap Rate); dotted vertical = 0%

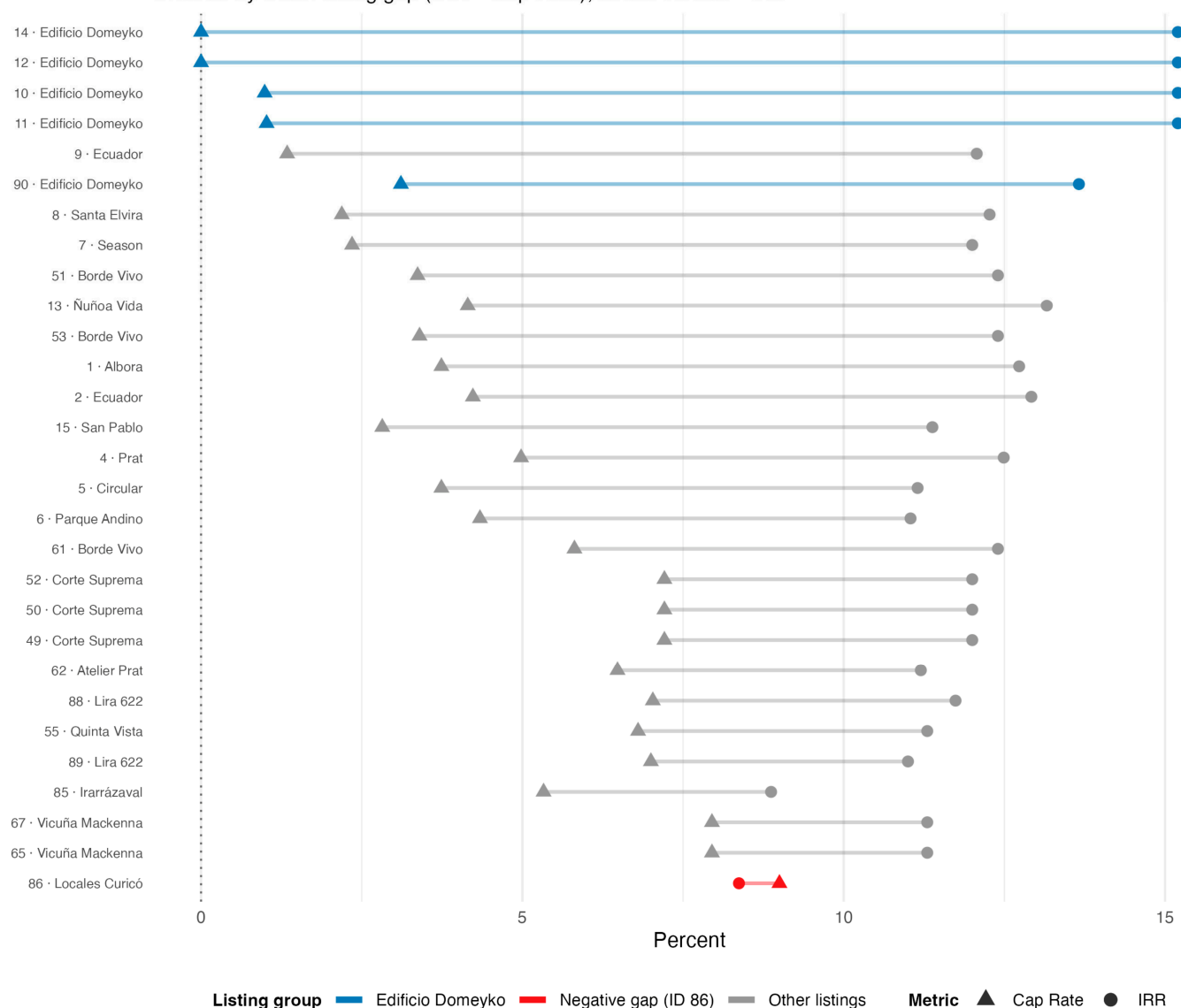


Figure 3. Advertised IRR and actualised Cap Rate per listing (n = 29), ordered by within-listing gap. Triangles mark the Cap Rate and circles the IRR, and the segment joining them is the within-listing gap. Blue denotes the Edificio Domeyko listings, red the single negative gap (ID 86), and grey all other listings; the dotted vertical line marks 0%.

8. Discussion and Conclusions

What makes Chile matter comparatively is the question of who gets to hold the claim. Chile’s Fintec Law, set against the US framework, draws a supervised retail perimeter with an entry price of one hundred thousand pesos. Access can widen on the income side of housing even as exclusion holds firm on the use side. For a household saving towards a

deposit, a rent token competes for the same savings. Whether token purchases delay saving for ownership or accompany it is an open question that holder-level data could answer. What the legal design does make available, at an entry price of CLP 100,000, is the rentier position [28].

This result sharpens the continuity thesis that Proskurovska and Paccoud [10] develop (Table 4). The Chilean case shows registry solemnity channelling financial reorganisation. The nineteenth-century Conservador now serves as the stable legal anchor from which income rights circulate privately and at speed. The civil-law registry, long imagined as a brake on housing financialisation, instead supplies the conditions for an unusually clean split between title and income.

Table 4. Joint display of evidence, interpretation and inferential scope.

Theme	Source	Observed Result	Interpretation Supported	Not tested by These Data
Registry friction (Section 4)	Statutes, platform documents	Title stays with the vehicle; economic rights circulate	Structural separation of title and income	Investor motives
Construction finance (Section 5.1)	Asset type, platform copy	6/35 Socio Preferente; fixed UF + 8.3–8.41%	Retail construction-finance offer exists	Volumes, household exposure, systemic risk
Listing geography (Section 5.2)	Location	27/35 listings in Santiago Centro	Concentration of the offer	Capital flows, investor preference
Framing (Section 5.3)	Marketing, terms	Prudential vocabulary; no holder decision rights	Compatibility with speculative framing	Investor behaviour
Funding/availability (Section 6.1)	Funded status, tokens available	32/35 fully funded; all label units ‘en venta’ and depart from issue price	Interface encodes a primary/resale distinction without explaining it	Executed trades, time on offer, illiquidity
Return metrics (Section 7)	IRR, Cap Rate	Gap 7.70 pp; IRR > Cap in 28/29	Juxtaposition of prospective and current metrics	Overpricing, realised returns
Omitted attributes (Sections 2.4 and 7)	Interface audit	Occupancy, arrears, building age, tenant income absent	Selective visibility	Effect of omission on decisions
Risk labelling (Section 7)	Risk rating	28/35 ‘Muy conservador’, incl. 0% yield	Rating juxtaposed with zero current yield	Rating methodology, realised losses

The dashboard evidence adds an empirical layer to that regulatory argument. Chile has drawn a perimeter around the financial instrument and left its housing effects largely beyond regulatory view. Within that perimeter, the interface determines which information reaches prospective buyers. In the snapshot analysed here, it displays a projected return averaging 12.21% next to a current yield averaging 4.51%, labels 91% of listings as fully funded while still offering units, and leaves occupancy, tenure and building condition off the listing card. The physical condition of the dwelling is thereby placed outside the information environment in which the purchase is made.

8.1. What the Optimistic Case Would Require

A more favourable reading of these infrastructures is available, and it deserves an answer on its own terms. De Los Reyes-Martín and colleagues [19] put forward decentralised behavioural finance as a framework for participatory urban finance and derive a cooperative stability condition, whereby decentralised governance holds stable where participation, amplified by technological enforcement, outweighs capital concentration. Their Spanish longitudinal evidence links citizen participation and technological adoption to governance stability and social housing outcomes and concentration to instability. Dorostkar [32] arrives at a comparable position by another path, holding that tokenised collective rights could back cooperatives and anti-eviction contracts wherever corporate issuers do not dictate the implementation.

The Chilean contracts and interface allow part of that condition to be examined. The card displays an unlabelled integer next to each asset (Table 1), and its referent is nowhere documented, so the number of participants cannot be established from the marketplace; the structure of participation can. Entry runs to CLP 100,000, and the entitlement it buys carries no vote, no influence over disposal, and no claim on use. Technological enforcement is in force, and what it enforces is the contract the issuer wrote. On the far side of the inequality, concentration cannot be read off the interface at all because the distribution of holdings is never published. The one variable on continuous display, projected return, is the variable least tied to governance of any sort. Measured against the criteria the optimistic framework itself sets out, the Chilean configuration fails the participation term and leaves the concentration term unobservable.

The outcome here follows from design choices, and the technology has little to do with it, a distinction that points to what would actually have to change. A cooperative configuration would need the fraction to carry a decision right, the register to disclose the distribution of holdings, and the instrument to attach to use and not to yield alone. None of these demands much of an Algorand standard asset technically. Each is commercially unappealing to an issuer whose revenue rides on transaction volume.

8.2. Regulating the Field of Vision

The smart-city contribution of the case lies in treating the marketplace as a real-time urban dashboard. Of the three properties set out in Section 2.4, the snapshot documents selection (the attributes absent from Table 1), ordering (the TIR precedes the Cap Rate in the reading order of all 35 cards) and temporality (funding and availability signals whose meaning the display leaves undetermined). The argument therefore concerns governance through selective visibility and makes no claim about behavioural effects on investors.

This opens a wider problem for smart-city data governance. Most urban data regulation has been built around privacy and security, that is, who may access a record and how it must be protected. Tokenisation dashboards raise a different regulatory question. The records here are public by design, and the potential harm sits in what the display leaves out more than in what it reveals. An interface whose selection of fields omits material information can sit comfortably inside full compliance with data protection rules because those rules govern how fields are treated once selected while saying nothing about the criteria for selecting them. A requirement to show actualised performance wherever projected performance appears would reach that prior act of selection, and current smart-city governance frameworks are poorly equipped for it. Research on digitally mediated governance in other municipal domains lands on a parallel conclusion, namely, that incentives aimed at a single actor rarely yield systemic equilibrium because the transmission effects travel through the interactions between actors [20].

Four proposals follow from the legal and interface analysis. Their calibration depends on data about holdings and volumes that are not currently public, which is itself an argument for the first. First, platforms ought to disclose location and tenure composition. Second, where holdings prove concentrated, aggregated tokenised holdings ought to be treated as institutional landlords. Third, the CMF and the Ministerio de Vivienda y Urbanismo need a formal coordination mandate. Fourth, dashboard metrics ought to come under regulatory oversight, with actualised Cap Rates displayed alongside projected IRRs with equal prominence, the assumptions behind projected returns disclosed, and risk ratings accompanied by the criteria used to assign them.

The technology carries no politics of its own. A distributed ledger that slices rent into hundred-thousand-peso fractions can just as readily record shares in cooperative housing [31,32]. The decisive question is the property relation the fraction encodes. Chilean law leaves room for a cooperative configuration, and the Fintec Law stays indifferent to whichever configuration market actors build. That legal indifference is itself a policy choice.

8.3. Limitations and a Research Agenda

This study offers the first empirical snapshot of tokenised housing metrics in Chile, though its cross-sectional design is a clear limitation, since the dataset captures one platform at one point in time. Five questions should shape the next empirical stage, and the paragraph that follows sets out what each would settle. The first is longitudinal, asking how dashboard IRRs compare with actual investor payouts over time and how far the projected returns displayed are realised. The Playwright extraction protocol built here already runs repeatedly without structural modification and is set up for longitudinal collection. The second turns on whether the lease types stated on the cards match actual contracts, as well as the share of short-stay arrangements. The third turns on whether resale offers on fully funded listings are executed, at what prices, and after how long, which would resolve the ambiguity documented in Section 6.1. The fourth turns on the volumes subscribed by instrument type, which would establish the scale of retail construction finance documented in Section 5.1. The fifth turns on the socioeconomic profile of token holders, which would mean linking platform registries to the kind of joint income and wealth accounts now being assembled from household surveys and macroeconomic balance sheets [30]. Such evidence would show whether the promised democratisation has materialised, or whether, as in the United States [12], concentration has re-emerged beneath a retail label. The longitudinal design outlined above bears unevenly on the conclusions reached here, and it is worth stating in advance which of them it can revise. Two are independent of the snapshot. The separation of title from income (Section 4) and the absence of decision rights attached to the fraction (Sections 6.2 and 8.1) rest on statutes and contracts, so repeated extraction would leave them untouched. Three others are expected to be refined rather than overturned. The composition of the product mix (Section 5.1), the concentration of listings in Santiago Centro (Section 5.2) and the magnitude of the IRR–Cap Rate gap (Section 7) are properties of a single day's offer, and repeated capture would establish whether they are stable features of the platform or the profile of one moment in its portfolio. The argument about selective visibility (Section 8.2) would be strengthened if the fields absent from Table 1 remain absent across successive captures, since a persistent omission is a design decision and not a momentary gap. One conclusion is genuinely open to reconsideration. The reading of fully funded listings with units on offer for resale by existing holders (Section 6.1) follows from wording and price at a single date; a series in which availability counts move in both directions while prices drift would support it, whereas counts that only decline would point to staged or later issuance and require that passage to be rewritten. Until those data

exist, one question stays decisive: who decides which dwellings become data streams, under what rules, and with what consequences for the right to the city?

Funding: This research was funded by Universidad de las Américas through its program for supporting open access publishing and through the Núcleo de Investigación Centro Producción del Espacio.

Institutional Review Board Statement: Not applicable. This study is based on publicly available regulatory instruments, platform disclosures, press coverage, and blockchain records. No human participants were recruited, and no primary data involving human subjects were collected. Automated extraction from the Reity marketplace was limited to asset-level information displayed publicly through the platform interface; it did not access personal data, user accounts, or authenticated content.

Informed Consent Statement: Not applicable.

Data Availability Statement: This study generated a new dataset. The structured dataset of tokenised housing assets extracted from the Reity marketplace on 31 August 2026 (reity_listings_35.csv), the raw extraction output (reity_data_20260831.csv), the codebook and the extraction and analysis code are deposited in Zenodo and openly released [<https://zenodo.org/records/22713487?token=eyJhbGciOiJIUzUxMiJ9.eyJpZCI6ImU2NTM5NGQxLTRhZDYtNDI2YS04NTY0LTM2YTFINTVkODFhYSIsImRhdGEiOnt9LCJyYW5kb20iOiJhN2UzNGUwODEzODdlNmM0N2Y3MjAwOTZhOTNjMjg4NSJ9.mbJTYaJUenpeKksn7yq8XyPrEQ3sExLfjHZMnfrmh3f7MaOzW1FOrDCeKeA-TOkRInQ2gsU3oc3QbV0Hm1JwOw>]. The qualitative materials analysed in this study—regulatory instruments, platform communications, industry press, and blockchain records—are publicly available and cited throughout the manuscript.

Conflicts of Interest: The author declares no conflicts of interest.

Abbreviations

The following abbreviations are used in this manuscript:

CMF	Comisión para el Mercado Financiero (Chilean Financial Market Commission)
MINVU	Ministerio de Vivienda y Urbanismo (Chilean Ministry of Housing and Urban Planning)
UF	Unidad de Fomento (inflation-indexed accounting unit)
NCG	Norma de Carácter General (CMF general rule)
SpA	Sociedad por Acciones (joint-stock company)
SII	Servicio de Impuestos Internos (Chilean Internal Revenue Service)
INE	Instituto Nacional de Estadísticas (Chilean National Statistics Institute)
KYC	Know Your Customer

References

- Charles, T. Lo Pensó, lo Hizo: Fraccional.cl y el Acceso a la Inversión Inmobiliaria [Interview]. *El Mercurio Online*, 6 May 2024. Available online: <https://www.emol.com/noticias/Economia/2024/05/06/1129649/tomas-charles-fraccional-empresa-chilena.html> (accessed on 30 August 2026).
- Instituto Nacional de Estadísticas (INE). *Encuesta Suplementaria de Ingresos*; INE Chile: Santiago, Chile, 2024.
- Reity SpA. *Plataforma de Inversión Inmobiliaria Tokenizada: Garantías, Costos y Póliza de Responsabilidad Civil NCG 502*; Reity SpA: Santiago, Chile, 2025. Available online: <https://www.reity.cl/> (accessed on 30 August 2026).
- Charles, T. ¿Cómo Calculamos la Rentabilidad? TIR, Plusvalía y Factores de Riesgo [How We Calculate Returns]. *Fraccional Blog*, 15 April 2025. Available online: <https://www.fraccional.cl/blog/posts/como-calculamos-la-rentabilidad> (accessed on 30 August 2026).
- El Diario Inmobiliario. Cuatro Alternativas Creadas por Chilenos para ser Propietario. *El Diario Inmobiliario*, 10 October 2025. Available online: <https://eldiarioinmobiliario.cl/tendencias/cuatro-alternativas-creadas-por-chilenos-para-ser-propietario/> (accessed on 30 August 2026).
- Moringiello, J.M.; Odinet, C.K. Blockchain real estate and NFTs. *William Mary Law Rev.* **2023**, *64*, 1131–1191.
- Swinkels, L. Empirical evidence on the ownership and liquidity of real estate tokens. *Financ. Innov.* **2023**, *9*, 45. [[CrossRef](#)] [[PubMed](#)]

8. Cornelli, G. *When Bricks Meet Bytes: Does Tokenisation Fill Gaps in Traditional Real Estate Markets?* BIS Working Papers No. 1311; Bank for International Settlements: Basel, Switzerland, 2025. Available online: <https://www.bis.org/publ/work1311.pdf> (accessed on 30 August 2026).
9. Proskurovska, A.; Morawski, J. Blockchains in housing markets: A simulation analysis of the impact on house price dynamics. *Hous. Stud.* **2026**; *in press*. [[CrossRef](#)]
10. Proskurovska, A.; Paccoud, A. Is the tokenization of property the next step in the financialization of housing? *Prog. Econ. Geogr.* **2026**, *4*, 100068. [[CrossRef](#)]
11. Proskurovska, A.; Birch, K. Tokenization of everything? Exploring the limits of blockchain technologies in the governance of financial markets and assets. *Finance Soc.* **2026**, *12*, 220–240. [[CrossRef](#)]
12. Crandall, J. Living on the block: How equitable is tokenized equity? *Big Data Soc.* **2023**, *10*, 20539517231208455. [[CrossRef](#)]
13. Vergara-Perucich, F.; Aguirre-Núñez, C. Tokenization of housing in Chile. Speculation, fiction and dematerialization. *Rev. Geogr. Norte Gd.* **2025**, *92*, 25.
14. Kitchin, R. The real-time city? Big data and smart urbanism. *GeoJournal* **2014**, *79*, 1–14. [[CrossRef](#)]
15. Kitchin, R.; Lauriault, T.P.; McArdle, G. Knowing and governing cities through urban indicators, city benchmarking and real-time dashboards. *Reg. Stud. Reg. Sci.* **2015**, *2*, 6–28. [[CrossRef](#)]
16. Mattern, S. Mission control: A history of the urban dashboard. *Places J.* **2015**. [[CrossRef](#)] [[PubMed](#)]
17. Sadowski, J. When data is capital: Datafication, accumulation, and extraction. *Big Data Soc.* **2019**, *6*, 2053951718820549. [[CrossRef](#)]
18. Shelton, T.; Zook, M.; Wiig, A. The ‘actually existing smart city’. *Camb. J. Reg. Econ. Soc.* **2015**, *8*, 13–25. [[CrossRef](#)]
19. De Los Reyes-Martín, O.; Gil, I.P.; Torres-Prunonosa, J.; Gómez-Martínez, R. Decentralized behavioral finance: A behavioral-technological framework for urban freedom and participatory governance. *Cities* **2026**, *173*, 106936. [[CrossRef](#)]
20. Hao, X.; Tian, T.; Li, K.; Zhang, X.; Dong, L. Unpacking the decision-making evolution mechanism of governance actors towards smart municipal solid waste (MSW) management: An insight from game approach. *Technol. Forecast. Soc. Change* **2025**, *220*, 124319. [[CrossRef](#)]
21. Diario Oficial de la República de Chile. *Ley N° 21.521 de 2023, Que Promueve la Competencia e Inclusión Financiera a Través de la Innovación y Tecnología en la Prestación de Servicios Financieros*; Diario Oficial de la República de Chile: Santiago, Chile, 2023.
22. López-Morales, E. Gentrification in Santiago, Chile: A property-led process of dispossession and exclusion. *Urban Geogr.* **2016**, *37*, 1109–1131. [[CrossRef](#)]
23. Vergara-Perucich, J.F.; Boano, C. Vida urbana neoliberal: Estudio de factores de jerarquización y fragmentación contra el derecho a la ciudad en Chile. *Rev. Direito Cid.* **2019**, *11*, 426–452. [[CrossRef](#)]
24. Aalbers, M.B. *The Financialisation of Housing: A Political Economy Approach*; Routledge: London, UK, 2016.
25. Farha, L. *Report of the Special Rapporteur on Adequate Housing as a Component of the Right to an Adequate Standard of Living, and on the Right to Non-Discrimination in This Context (A/HRC/34/51)*; United Nations Human Rights Council: Geneva, Switzerland, 2017.
26. Fields, D. Automated landlord: Digital technologies and post-crisis financial accumulation. *Environ. Plan. A* **2022**, *54*, 160–181. [[CrossRef](#)]
27. Rolnik, R. Late neoliberalism: The financialization of homeownership and housing rights. *Int. J. Urban Reg. Res.* **2013**, *37*, 1058–1066. [[CrossRef](#)]
28. Christophers, B. *Rentier Capitalism: Who Owns the Economy, and Who Pays for It?* Verso: London, UK, 2020.
29. Cui, C.; Geertman, S.; Hooimeijer, P. Access to homeownership in urban China: A comparison between skilled migrants and skilled locals in Nanjing. *Cities* **2016**, *50*, 188–196. [[CrossRef](#)]
30. Blatnik, N.; Kavonius, I.K.; Morais, L.T. First attempt to estimate a joint distribution for income and wealth within the distributional national accounts framework. *Rev. Income Wealth* **2026**, *72*, e70075. [[CrossRef](#)]
31. Wang, J.; Jiang, W. OTDF platform: A new paradigm of homeownership for life with mobility and liquidity. *Int. J. Archit. Comput.* **2024**, *22*, 129–148. [[CrossRef](#)]
32. Dorostkar, E. Beyond solutionism: Quantum-secured NFTs as contested infrastructures for radical urban futures. *Local Environ.* **2026**, *31*, 732–739. [[CrossRef](#)]
33. Kochergin, D.A.; Andryushin, S.A. Digital assets, crypto-assets and digital currencies: Economic content and potential of convergence. *St. Petersburg Univ. J. Econ. Stud.* **2023**, *39*, 496–533. [[CrossRef](#)]
34. Yarotska, T.R.; Yakushenko, O.S. Complexity of selling products and services for cryptocurrencies. *Acad. Rev.* **2025**, *2*, 174–186. [[CrossRef](#)]
35. Chen, W.; Phelan, G. Digital currency and banking-sector stability. *J. Financ. Stab.* **2025**, *78*, 101414. [[CrossRef](#)]
36. Bhattacharjee, A.; Carlomagno, G.; Veronese Passarella, M. The impact of CBDC-based disintermediation on the banking sector and the economy: An SFC approach. *Rev. Polit. Econ.* **2025**; *in press*. [[CrossRef](#)]
37. Parra-Polanía, J.A.; Martínez-Ventura, C. Optimal CBDC design: A model with two access mechanisms and the role of anonymity. *J. Financ. Stab.* **2026**, *83*, 101516. [[CrossRef](#)]
38. Andrieş, A.M.; Ongena, S.; Sprincean, N. Sectoral credit allocation and systemic risk. *J. Financ. Stab.* **2025**, *76*, 101363. [[CrossRef](#)]

39. Lefebvre, H. *The Production of Space*; Nicholson-Smith, D., Translator. Original Work Published 1974; Blackwell: Oxford, UK, 1991.
40. Harvey, D. *The Limits to Capital*, New ed.; Original Work Published 1982; Verso: London, UK, 2006.
41. Stivers, A.; Tsang, M.; Deaves, R.; Hoffer, A. Behavior when the chips are down: An experimental study of wealth effects and exchange media. *J. Behav. Exp. Financ.* **2020**, *27*, 100323. [[CrossRef](#)]
42. Toraman, Y.; Geçit, B.B. User acceptance of metaverse: An analysis for e-commerce in the framework of Technology Acceptance Model (TAM). *Sosyoekonomi* **2023**, *31*, 85–104. [[CrossRef](#)]
43. Diario Oficial de la República de Chile. *Ley N° 18.045 de 1981, Ley de Mercado de Valores*; Diario Oficial de la República de Chile: Santiago, Chile, 1981.
44. Comisión para el Mercado Financiero (CMF). *Todo Sobre Fintec: Ley N° 21.521 y Norma de Carácter General N° 502*; CMF Educa: Santiago, Chile, 2024. Available online: <https://www.cmfchile.cl/educa/621/w3-propertyvalue-48145.html> (accessed on 30 August 2026).
45. Comisión para el Mercado Financiero (CMF). CMF Publica Normativa que Regula el Sistema de Finanzas Abiertas de la Ley Fintec (NCG N° 514). 3 July 2024. Available online: <https://www.cmfchile.cl/portal/prensa/625/w4-article-82737.html> (accessed on 30 August 2026).
46. Comisión para el Mercado Financiero (CMF). Registro de Prestadores de Servicios Financieros y Plazos de Autorización bajo NCG 502. 3 February 2025. Available online: <https://www.cmfchile.cl/portal/principal/623/w4-propertyvalue-48738.html> (accessed on 30 August 2026).
47. Reity SpA. ¿Qué es y Cómo Funciona Reity? Tipologías de Tokens y Registro Digital. *Reity Blog*, 14 January 2025. Available online: <https://maroon-emails-347318.framer.app/blog/que-es-y-como-funciona-reity> (accessed on 30 August 2026).
48. Fraccional SpA. *Tokenización de Inmuebles: Vehículos Patrimoniales y Derechos Económicos*; Fraccional SpA: Santiago, Chile, 2025. Available online: <https://www.fraccional.cl/> (accessed on 30 August 2026).
49. Charles, T. 10 Razones por qué Dejamos Atrás las SPAs [Ten Reasons Why We Left SPAs Behind]. *Fraccional Blog*, 19 July 2026. Available online: <https://www.fraccional.cl/blog/posts/no-mas-spa> (accessed on 30 August 2026).
50. Charles, T. ¿Un Mercado Fraccionario para Negocios Inmobiliarios? [A Fractional Market for Real Estate Business?]. *Fraccional Blog*, 12 March 2025. Available online: <https://www.fraccional.cl/blog/posts/como-financiar-proyectos-en-fraccional> (accessed on 30 August 2026).
51. Algorand Foundation. Algorand Standard Asset ID 2229464160: Reity Socio Preferente. Pera Algorand Explorer. 2026. Available online: <https://explorer.perawallet.app/asset/2229464160/> (accessed on 30 August 2026).
52. Reity SpA. *Nos Estamos Regulando ante la CMF*; Reity SpA: Santiago, Chile, 2026. Available online: <https://www.reity.cl/regulacion> (accessed on 30 August 2026).
53. Comisión para el Mercado Financiero (CMF). *Dictámenes Sobre Calificación de Tokens y Valores Negociables bajo la Ley N° 18.045*; CMF Chile: Santiago, Chile, 2023. Available online: <https://www.cmfchile.cl/institucional/inc/dictamenes.php> (accessed on 30 August 2026).
54. Fraccional SpA. ¿Qué Debes Declarar si Compraste en Fraccional? Guía Tributaria y Declaración Jurada 1949. *Fraccional Blog*, 12 March 2025. Available online: <https://www.fraccional.cl/blog/posts/que-debes-declarar-si-compraste-en-fraccional> (accessed on 30 August 2026).
55. Servicio de Impuestos Internos (SII). Tratamiento Tributario de Operaciones con Criptomonedas y Activos Digitales. 24 October 2025. Available online: https://www.sii.cl/preguntas_frecuentes/criptomonedas/001_250_7873.htm (accessed on 30 August 2026).
56. Chócale. Reity: Startup Permite Invertir en Propiedades con Tokens Desde 100 mil Pesos. *Chócale*, 14 September 2023. Available online: <https://chocale.cl/2023/09/reity-startup-permite-invertir-propiedades-token-100-mil-pesos/> (accessed on 30 August 2026).
57. Diario Financiero. Reity Lanza Token para Masificar Acceso a Inversión Inmobiliaria. *FinteChile*, 13 August 2024. Available online: <https://www.fintechile.org/noticias/reity-lanza-token-para-masificar-acceso-a-inversion-inmobiliaria> (accessed on 30 August 2026).
58. Smith, N. Toward a theory of gentrification: A back to the city movement by capital, not people. *J. Am. Plan. Assoc.* **1979**, *45*, 538–548. [[CrossRef](#)]
59. Sajter, D.; Kuzmić, M. Financial nihilism and the phenomenon of memecoins. *Ekonom. Vjesnik* **2026**, *39*, 255–271. [[CrossRef](#)]
60. Axford, N.; Pinch, S. Growth coalitions and local economic development strategy in southern England: A case study of the Hampshire Development Association. *Polit. Geogr.* **1994**, *13*, 344–360. [[CrossRef](#)]
61. Reity SpA. *Términos y Condiciones de Uso de la Plataforma Reity*; Reity SpA: Santiago, Chile, 2025. Available online: <https://www.reity.cl/terminos-y-condiciones> (accessed on 30 August 2026).
62. Arnstein, S.R. A ladder of citizen participation. *J. Am. Inst. Plan.* **1969**, *35*, 216–224. [[CrossRef](#)]
63. Fernandes, M.L.; Moreno Pires, S.; Lopes, S.; Polido, A. Unveiling the public voices: Analysis of public participation in urban master plans in Portugal. *Cities* **2026**, *173*, 106961. [[CrossRef](#)]

64. Nelson, S.; Lewis, J. Resident engagement in the regeneration of social housing: The case of Woodberry Down, London. *Int. J. Hous. Policy* **2021**, *21*, 48–69. [[CrossRef](#)]
65. Gustavsson, E.; Elander, I. Sustainability potential of a redevelopment initiative in Swedish public housing: The ambiguous role of residents' participation and place identity. *Prog. Plan.* **2016**, *103*, 1–25. [[CrossRef](#)]
66. Azunre, G.A. Unpacking the practice of participation in participatory slum upgrading: Critical insights from Ghanaian informal settlements. *Habitat Int.* **2025**, *166*, 103611. [[CrossRef](#)]
67. Lefebvre, H. *Writings on Cities*; Kofman, E., Lebas, E., Eds. and Translators; Blackwell: Oxford, UK, 1996.
68. Charles, T. ¡Fraccional Cambió de Look! De Metros Cuadrados a Fracciones y Cálculo por TIR [From Square Metres to Fractions]. *Fraccional Blog*, 20 July 2026. Available online: <https://www.fraccional.cl/blog/posts/fraccional-cambio-de-look> (accessed on 30 August 2026).
69. Damiani, J. Architecture in postreality: Emerging approaches to space in hybrid realities. *Archit. Des.* **2023**, *93*, 38–47. [[CrossRef](#)]
70. Portal Innova. Fintech Chilena Completa por Primera Vez el Ciclo Total de un Activo Inmobiliario Tokenizado. *Portal Innova*, 7 November 2024. Available online: <https://portalinnova.cl/fintech-chilena-completa-por-primera-vez-el-ciclo-total-de-un-activo-inmobiliario-tokenizado/> (accessed on 30 August 2026).
71. Ecosistema Startup. Fintech Chilena Completa Ciclo Total de Activo Inmobiliario Tokenizado. *Ecosistema Startup*. 5 November 2024. Available online: <https://ecosistemastartup.com/fintech-chilena-completa-ciclo-total-de-activo-inmobiliario-tokenizado/> (accessed on 30 August 2026).

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.