

Empirical evidence on the ownership and liquidity of real estate tokens

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Empirical evidence on the ownership and liquidity of real estate tokens

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Abstract
To better understand the potential and limitations of the tokenization of real asset markets, empirical studies need to examine this radically new organization of financial markets. In our study, we examine the financial and economic consequences of tokenizing 58 residential rental properties in the US, particularly those in Detroit. Tokenization aims at fragmented ownership. We found that the residential properties examined have 254 owners on average. Investors with a greater than USD 5,000 investment in real estate tokens, diversify their real estate ownership across properties within and across the cities. Property ownership changes about once yearly, with more changes for properties on decentralized exchanges. We report that real estate token prices move according to the house price index; hence, investing in real estate tokens provides economic exposure to residential house prices.

Keywords: Blockchain, Cryptocurrency, Real estate, Tokenization
JEL Classification: G1, G12, G23, G32, K25, O33, R30, R31



How it (kind of) works



PROPERTY FINANCIALS	
Gross Rent / year	\$ 9,120.00
Gross Rent / month	\$ 760.00
Monthly Costs	- \$ 256.00
Net Rent / month	\$ 504.00
Net Rent / year	\$ 6,048.00
Total Investment	\$ 55,022.00
Expected Income	10.99%
<small>Not including capital appreciation</small>	



RealToken S 3323 Waverly St Detroit MI ERC-20

Contract

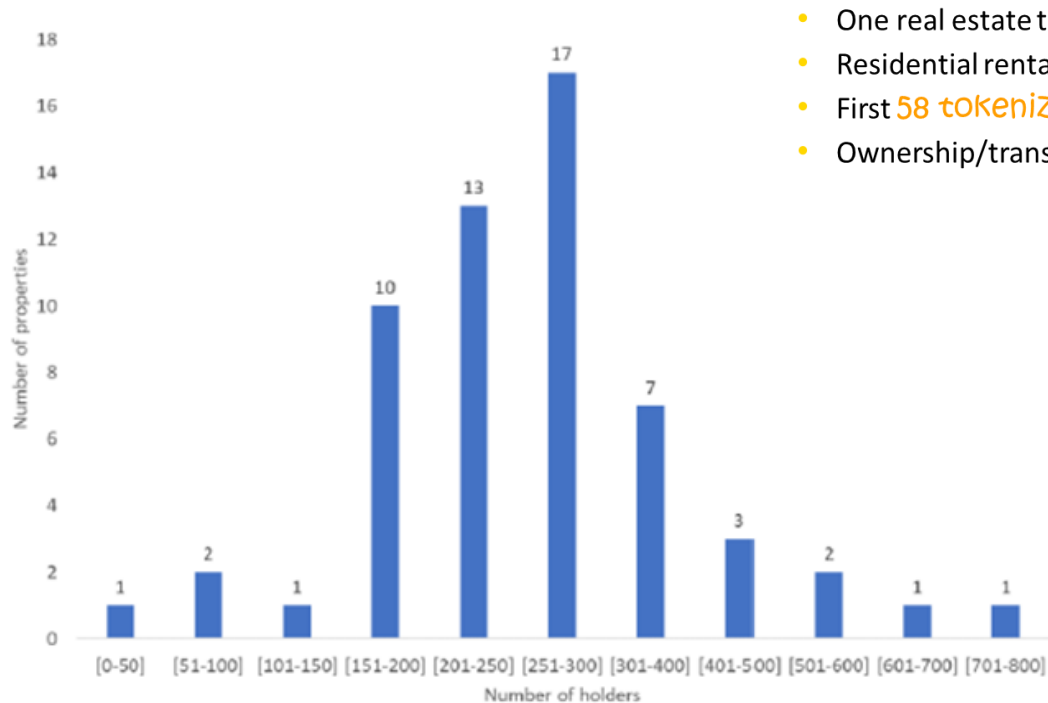
0x009bab289f104699ae87e576294d18ed505faa61

Total supply

1,100 REALTOKEN-S-3323-WAVERLY-ST-DETROIT-MI

How many owners does a typical residential property have after tokenization?

Figure 1: Histogram of number of holders per property

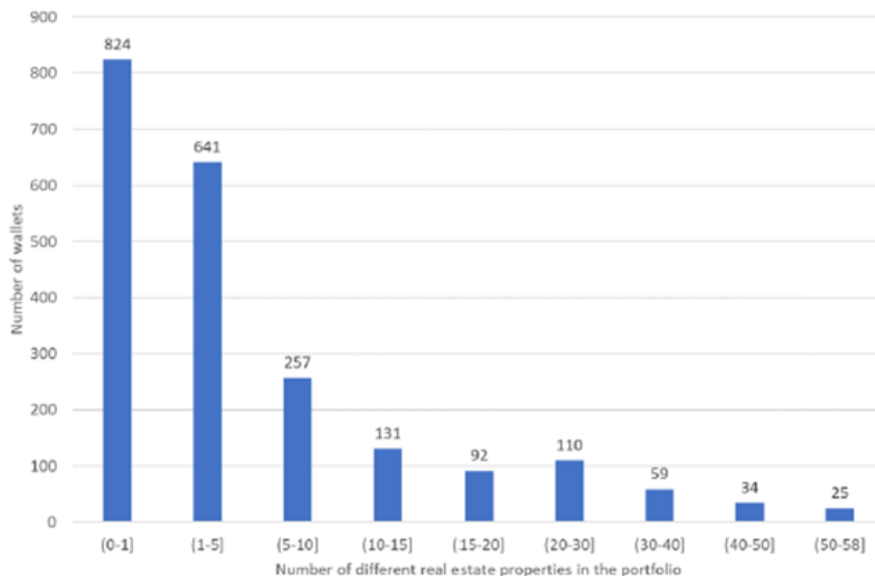


- One real estate tokenization company **RealT**
- Residential rental properties, mostly in **DETROIT**
- First **58 tokenized properties** are in my sample (until April 2021)
- Ownership/transaction data from **Etherscan**

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Do token investors use the fractional ownership to create **diversified real estate portfolios**?

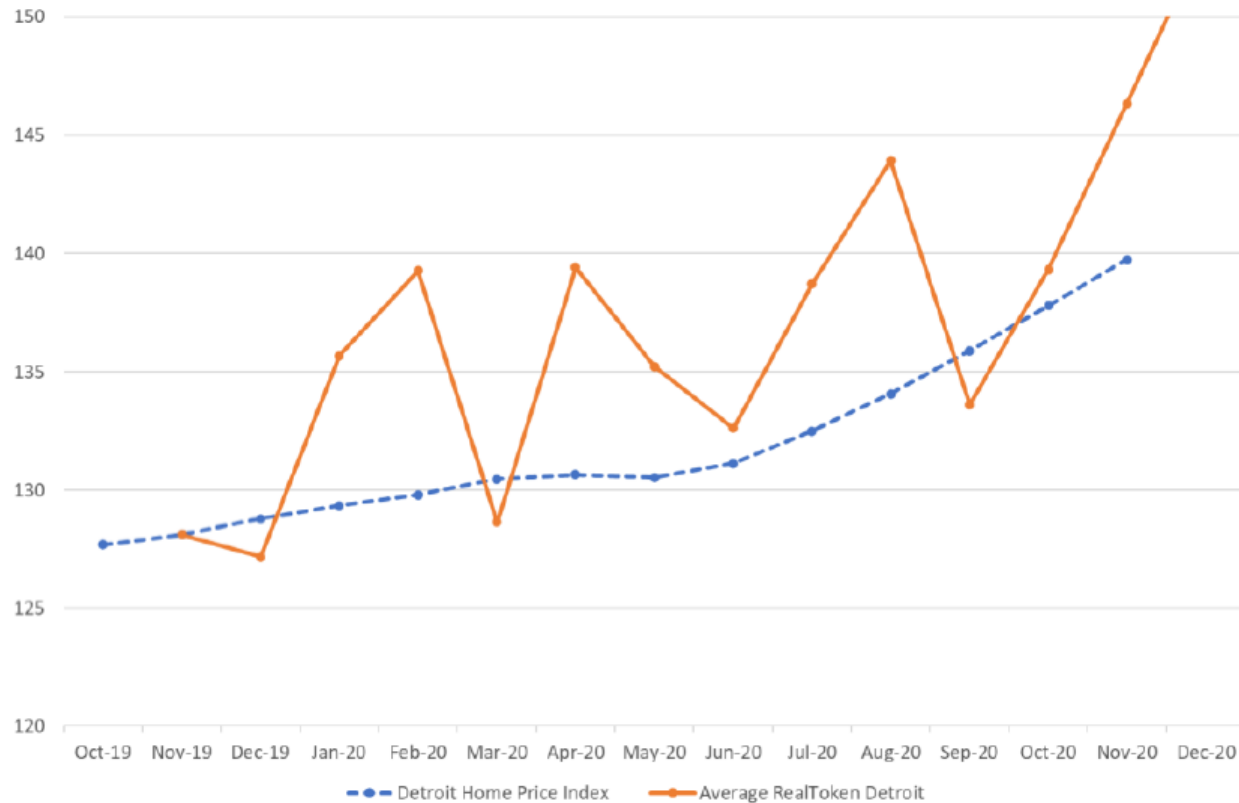
Figure 3: Histogram of the number of different real estate properties per portfolio



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Figure 7: Home price index for Detroit MI and average RealToken Price

Source: S&P/Case-Shiller MI-Detroit Home Price Index, downloaded from FRED.



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Conclusions



A little bit more is known about the real-world *practice* of *tokenization*

- *How many owners* does a typical residential property have after tokenization?

258

- Do token investors use the fractional ownership to create *diversified real estate portfolios*?

Yes (mostly)

- **How liquid** are individual residential properties after tokenization?

100% (but trading costs)

- Are prices of tokenized assets related to *economic fundamentals* of the investment?

Yes (but very limited data)