

TOKENIZATION IN LEBANON

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Abstract:

Lebanon's ongoing financial crisis, which began in 2019, has decimated the traditional banking sector, resulting in a severe liquidity trap, the collapse of the national fiat currency, and a profound loss of public trust in centralized financial institutions. Consequently, traditional avenues for real estate investment and venture capital financing have been paralyzed. This paper proposes a decentralized financial framework utilizing blockchain tokenization to bypass the failed banking system, restore investor confidence, and stimulate macroeconomic recovery. Specifically, the study advocates for the deployment of a Layer 2, Proof of Stake (PoS) blockchain architecture to fractionalize and digitize real estate assets and venture capital equity. The proposed model integrates smart contracts for automated dividend distribution, an Oracle layer for real-time asset valuation and Proof of Reserve, and stringent Know Your Customer (KYC) protocols. To overcome the domestic "trust gap," the framework introduces a "Phygital Bridge"—partnering with established local municipalities and reputable developers to secure physical assets while digital tokens are traded globally. The analysis demonstrates that tokenization dramatically lowers barriers to entry, enhances market liquidity, and provides a secure, transparent mechanism to attract capital from both local retail investors and the vast Lebanese diaspora. Ultimately, this research concludes that transitioning to a digital-first, tokenized economy empowers citizens by democratizing investment and lays the foundational infrastructure for a resilient, decentralized monetary system in Lebanon.

Keywords:

Blockchain Tokenization, Lebanese Financial Crisis, Decentralized Finance (DeFi), Real Estate Tokenization, Venture Capital, Proof of Stake, Smart Contracts, Macroeconomic Recovery

Introduction: "The What & Why"

Our country Lebanon the land of God, has been facing unstable financial situation since 2019, as a result of this the Lebanese currency depreciated more than 5000 percent of its original value, which led to the current collapse of the banking system from top to bottom (Bank RUN). Traditional financial systems lost the trust of the Lebanese people and people are looking for new ways to generate interest or stable income or to store money and others are finding it hard to invest as they cannot take loans anymore (Daher, 2022). In addition to this, there is a lot of new entrepreneurs' that would like to pursue their dreams of becoming an investor in new firms or in real estate and this option is still not well developed in Lebanon as there is no public exchange where people can invest in new ventures and there is no housing loans for the people that would like to invest or own real estate.

The solution for this problem is the new emerging financial sector the Blockchain. Blockchain is a decentralized immutable cryptographic hashing and a consensus mechanism. The process that the blockchain work in is requiring a transaction, networks validate the transaction, new block is made in a way linked to pervious block using the hash of the previews block and finally the block is added to the chain and no one can change its aspect or the information in it (Ibrahim et. Al, 2025). We can solve the Lebanese problem by issuing a tokenized platform for new venture and real estates. Tokenization refers to the process of converting those assets or company shares into digital blocks recorded on the blockchain. For a country that has the economic circumstances of Lebanon, tokenization can be a good solution to attract international investors, local investors and donors (Saber & Sassine, 2022).

In addition, tokenization can solve and regain the trust of the people and the Lebanese community as it is a decentralized financial opportunity that reduces reliance on banks and financial institution. Also, this would lead to more transparency as every transaction is stored on the blockchain and no one has the ability to change it.

Through this topic I will be exploring the potential and the ability or crypto tokenization in Lebanon and I will mention the risks here, and how it will play a role in getting back people trust and giving them financial opportunities.

Literature Review: "Why would it work "

My father is someone that worked his entire life day and night to save money through his career so he can have the desired retirement lifestyle and all of a sudden everything disappeared from a well-established financial man to someone that can barely get his daily needs all of this was for the reasons that banks collapsed, same things happened with other Lebanese citizen's or even foreign investors. And unlike the limited case of Silicon Valley and Silver gate banks in USA (Beainy & Kamel, 2023), this collapse in Lebanon was total and led to a banking trust gap. Which then led to the absence of financing in a country that needed this the most.

In addition to the banking trust gap, I can see every day a Lebanese man who owns more than one asset and more than one land but is still left with zero cash in hand and no one is buying the assets that he is selling because of the liquidity trap and because mortgage loan is still not redeveloped in Lebanon after the crisis.

Furthermore, me as a university student that likes to invest in new venture, I am finding it hard, impossible and time exhausting to look at new venture developed from Lebanese entrepreneur's and investing in them as there is no exchange in Lebanon that direct this type of investments. In addition, many Lebanese diasporas that would like to invest in Lebanon are not doing it because there is this gap in the banking system trust, which would be sold by either dollarization (Beainy et. Al, 2025) or tokenization.

Methodology: "The mechanics of tokenization in Lebanon "

For the process of Tokenization everything would start with building a blockchain on the basis of a project named (SHARKLEB) this is where the crypto coin is going to be made and under this coin there will be a variety of tokens each token presenting a real estate for those that would like to invest in them and venture companies for those that would like to invest in them a token would represent a (piece of a house or token: a house valued of 200 000\$ would be divided into 20 000 tokens where at first each token is valued at 10\$)

The best blockchain choice for Lebanon should be a Layer 2 Blockchain (a secondary blockchain built on top of an existing blockchain) this type of Blockchain would reduce transaction cost, increase transaction speed, increase security and increase scalability.

Every transaction would be recognized and accepted by a smart contract which is a self-executing code that replace a broker. The guidelines for this Smart contract is going to be concise:
1-Every transaction made should be encrypted by the owner name or hash rate as an example Building 560 in Andaket Akkar, Maroun Antoun. 2-

If the asset owned is a rental, the smart contract can be scheduled to send dividends as part of tokens or money every month based on their ownership percentage or agreement and the same can happen if the token is representing a joint venture company.
3-For all this to happen in an efficient way every person that is willing to invest in such investment's should pass the Know Your Customers (KYC) part so every investment can be placed under the identity of each investor. The code in the smart contract can implement this by only accepting transactions that are verified by real identities.

You might ask what about the pricing of the assets how they would be reevaluated and changed daily in terms of token's the solution for this would be to have an Oracle Layer that combine the fluctuation of the prices with the real time value of USD to LBP and also provide a proof of reserve, proofing to investors that the part that they are investing in really exists. By compelling with all those data the Oracle Layer can make sure that the tokens are not mispriced.

Results: "Real estate and Venture Capital tokenized "

1-Real estate: sometimes its hard to find 1,000,000\$ to invest in a real estate but with the presence of real estate tokenization this would be easy, Take as an example: A real estate valued at 1,000,000\$ in Kaslik is hard to buy but with the presence of tokenized assets this will not be the case anymore as this real estate can be divided into 1000 tokens were each token is worth 1,000\$, in addition to not having this amount of liquidity this will help Lebanese students invest with small amounts of Fresh Dollars.

Tokenized assets will lead the Lebanese economic to a long term growth as with tokenization people that live abroad can invest in Lebanese properties and also owns fractions of commercial

project by just investing in a token and as we know the Lebanese that leave abroad are more than the one that live in Lebanon so this type of investments will lead to real estate price increase and also to a boost in the economic.

Table 1: Real Estate tokenization

Tokenized Assets	Untokenized Assets
Cheap because of the availability of fractions	Expensive: required to buy the entire asset
Increase liquidity	Hard to sell because the buyer is required to buy the entire asset
Fast purchase just with a click	Slow purchase it needs paper and lawyers
Everything is encrypted on the blockchain	Requires paper that might be stolen
Good for diversification as you can buy in different places	Not good for diversification because you buy the entire property

Note: TOKENIZATION IN LEBANON 2026

As a conclusion of this table tokenization is better for investors but untokenized assets are better for people that want to buy their own home or space of living.

2-Venture Capital Tokenized: as an entrepreneur and an investor every day I see people my age or older looking for opportunities where they can invest into Lebanese startups and not finding and for those who found the opportunity it was so expensive even though the entrepreneur wanted money but also wanted a big amount of money that cannot be financed by a single individual but need more. And from this part I came up with the idea of tokenized venture capital where every new entrepreneur can list part of his company in terms of tokens with a white paper that state his business plan of between 25 to 30 page as an example for this: An entrepreneur valuate his startup at 100,000 \$ and he is in need of 45,000 \$ this entrepreneur can issue his company through 10 000 tokens where he own 5 500 of them with the price of each token at 10\$ and the amount of money will be locked by the smart contract until the entrepreneur reach the desirable amount of 45,000\$. After this step each month there will be a statement of profit published on the blockchain and through with the dividend will be distributed among token holders.

Table 2: Venture Capital tokenization

Tokenized New Venture	Regular New Venture
Opportunity for small capital investors	Hard for small capital investors
The entrepreneur state what percentage he is willing to issue	The power of the investor is more than the one of the entrepreneurs
Access to global investors	Hard to get the interest of everyone

Note: TOKENIZATION IN LEBANON 2026

As a conclusion we can say that tokenized new venture is a good opportunity for the Lebanese people and it's a win situation for both the investor and the entrepreneurs.

Discussion and conclusion: "The so what ? "

One of the main problems nowadays in Lebanon is the expensive electricity bills and this is on of the barrier that have a negative impact on using proof of work as this type of mining require high electricity power so the best practice for a Lebanese token would be a proof of stake blockchain. The proof of stake blockchain is a type of blockchain where the coin holder are the validators of the transaction and those validators get the profit based on the amount of coins they own or they lock, and if anyone try to trick the system there will be down on their watch so they lose part of their staked tokens. We will be using this type of blockchain because it uses 99% less electricity than bitcoin, it has low fees, and the people that are mining don't have the need to own mining rigs they can mine using standard laptops or even a cloud server. This will lead to investors that are not only willing to generate money from investments but are also looking to generate percentage on the money they own.

In addition to the proof of stake the Lebanese people or any investor might have negative trust on this type of project because of what happened to them through their life, so the best solution to get the Lebanese community trust back is by getting a phygital bridge which is a local company that has already established its trust among the Lebanese people and this company will own the physical asset while tokens are traded online this problem can be solved by getting partnerships with municipalities, confidence real estate, solidere or even the board of trustees can be composed of well-established people In the Lebanese community.

Looking forward at every aspect of tokenization this is a solution not only for an entrepreneur but this is a solution that can boost the Lebanese economy by attracting new investors and also this will be a great opportunity for every entrepreneur that is looking for affordable ways to fund his business. This type of technology can also be applied by the Lebanese government as a way to get the people's trust and to increase the liquidity of the Lebanese economy by attracting foreign investors and the Lebanese immigrants. through this process Lebanon will be one of the first countries that skip traditional banking and move to a digital first economy.

With the help of the government this type of project can be implemented through a window of opportunity where the government can allow a trial period for small, tokenized projects to prove

its safety and through this opportunity our project can skip the feasibility analysis to get straight forward to the implementation part.

Moving forward tokenization in Lebanon offer a lead toward the renovation path for the economy recovery by replacing banks or institutions with digital blockchains and publicly available information, although it is not a complete answer and solution for the Lebanese financial crisis. Lebanon can still be one of the first governments that push its economy towards this type of solution, where the Lebanese people can get their hand back on their money and stop looking at their net worth as an illiquid asset or as an idea that is not fundable, it will also shift the empowerment of the people on their money from a centralized bank to a decentralized blockchain, providing the necessary tools toward building a modern and a decentralized monetary system.

References

- Beainy, R. H., & Kamel, J. K. (2023). Surviving the Post Silicon Valley Bank Crisis. *International Journal of Membrane Science and Technology*, 10(3), 775-785.
- Beainy, R., Kamel, C., Subrahmanyam, S., & Younis, M. (2025). The World needs the USD. *Available at SSRN 5734284*.
- Daher, J. (2022). Lebanon, how the post-war's political economy led to the current economic and social crisis. European University Institute.
- Ibrahim, M., Kamel, C., Saber, A., & Beainy, R. (2026). Cryptocurrency's Transition to a Sovereign Financial Infrastructure 2025-2030. *Available at SSRN 6011174*.
- Saber, A. M., & Sassine, M. E. (2022). Reflections on internal control and internal audit roles for ensuring financial transparency toward Lebanese NGOs financial donors. *EuroMed Journal of Management*, 4(3), 186-198.