

WHITEPAPER

HODLBANK: Global Electronic Banking System

HIDDEN FOUNDER

www.hodlbank.com

Abstract.

HodlBank offers a fully crypto-based, secure, and sustainable financial model as an alternative to the fragile structure of traditional banking.

- **Security:** Funds are protected at the highest level through cold wallets, multi-signature, on-chain traceability, and the closed treasury model.
- **Bonus System:** A fair distribution model has been developed that rewards patient investors and is strengthened by the contributions of impatient users.
- **Future Options:** With Bronze, Silver, and Gold packages, each user can choose their own risk–reward profile.
- **Credit System:** 50% collateralized credit, 14 days of interest-free use, and a global crypto credit score model provide flexibility to investors.
- **Global Crypto Credit Score:** HodlBank aims to build a credit score standard that can be used not only within its own ecosystem but also worldwide.
- **Tokenomics:** The token to be issued on the SOL network will be distributed through an airdrop and pre-sale model to the community; a non-speculative, community-focused launch is planned.
- **Community & Development:** 15% of future option costs are allocated to community and development, ensuring the continuous growth of the ecosystem.
- **Referral and Content Creator System:** Incentive mechanisms have been created for both individual users and social media content creators.
- **Risk Mitigation:** There is no exchange rate risk; thanks to the closed treasury structure, funds operate solely for the benefit of users.

HodlBank is not just an investment platform; it is designed to be the crypto banking system of the future.

Our goal is to build an ecosystem that rewards patient investors, is transparent, fair, and usable on a global scale.

1.Introduction

Problem Statement (Issues of the Current Banking System)

Today, local banking systems are structures where money flows are tightly controlled by governments. However, three fundamental problems stand out in these systems:

- 1. Fragility:** During times of crisis, macroeconomic factors create increasing pressure on banks, weakening their balance sheets.
- 2. Risky Loans:** The recovery rates of risky loans in banks decrease over time with a “snowball effect,” making the financial structure even more fragile.
- 3. Ghost Balance Sheets and Book Money:** Current banking has remained limited to “book money creation,” increasing the circulation of money without real asset backing. This creates inflated and unsustainable balance sheets.

As a result:

- Countries continuously print money,
- Inflationary pressure becomes permanent,
- The banking system suffers a loss of public trust.

Difference Between Inflationary Traditional Money Supply (M_t) and Crypto-Based Fixed Supply

$$\lim_{t \rightarrow \infty} \frac{M_t}{K} > \infty \text{ inflation risk in traditional system}$$

In the HodlBank Model:

$$\Delta S = f(B, C, T)$$

B: Bonus mechanisms

C: Collateral (asset-backed loans)

T: Token economy

This function defines system sustainability in a transparent and predictive mathematical framework.

With this function, the sustainability of the system is defined within a transparent and predictable mathematical framework.

HodlBank Solution (Model of Resolution)

Unlike traditional banking, HodlBank is established within a structure that prioritizes the security of funds rather than creating book money. The system aims to minimize fund losses during times of crisis and encourage long-term investors.

System Flow

- 1. Fund Deposit:** Users deposit their funds into HodlBank.
- 2. Secure Custody:** Funds are securely stored in cold wallet infrastructure.
- 3. Bonus Index:** The system operates on the principle of “payment from the impatient to the patient.”
 - Users who withdraw funds early pay a fund cost (penalty fee).
 - This cost is transferred to the system’s Bonus Index (BE).
 - The returns of patient users increase as the Bonus Index grows.

$$FO = \sum_k O_k$$

$$FO_{community+dev} = 0.15 \cdot FO$$

$$FO_{bonus} = 0.85 \cdot FO$$

$$BE_{t+1} = BE_t + FO_{bonus}$$

Definitions :

FO : future option pool (sum of early exit costs)

O_k : option cost paid by user k

$FO_{community+dev}$: 15% of FO allocated to community + development

FO_{bonus} : 85% of FO allocated to bonus pool

BE_t : current bonus index at time t

BE_{t+1} : updated bonus index

User Benefits

- **Security:** Assets are kept in cold wallets, providing protection against losses.
- **Additional Return:** Users who patiently hodl earn extra income from the bonus index.
- **Fair Distribution:** The cost paid by impatient users turns into rewards for patient users.

Philosophy

HodlBank essentially proposes a “closed treasury”: funds are shared in favor of the patient. Thus, the system gains a reliable, transparent, and long-term investor-friendly structure.

2. Bonus System and Future Options

Bonus System

One of HodlBank’s core innovations is the bonus system, built on the model of payment from the impatient to the patient.

- **Fund Deposit:** The user deposits their funds, which are securely stored in cold wallets.
- **Early Withdrawal:** A user who withdraws funds before the maturity date pays a “fund cost” (penalty fee).
- **Bonus Pool:** These costs are collected and added to the Bonus Index (BE).
- **Patient Investor:** A user who remains loyal to the hodl period both secures their assets safely and earns additional bonus returns.

$$BE_t = \sum_{i=1}^N P_i(t)$$

$$B_u = \frac{A_u}{\sum_j A_j} BE_t$$

Definitions :

BE_t : bonus pool (total bonus index)

$P_i(t)$: early exit penalty paid by user i

A_u : capital contributed by user u

$\sum_j A_j$: total system capital

Future Options

HodlBank advances the traditional bonus system by defining Future Options.

- **Option Cost:** When a user wishes to exercise the right of early withdrawal, they pay an “option cost.”
- **Option Pool:** This cost, just like in the bonus pool, contributes to the index of the entire ecosystem.
- **Risk Management:** In this way, the system both rewards investors who patiently hold and makes the exits of impatient users sustainable.

$$FO = \sum_{k=1}^M O_k$$

$$BE_{t+1} = BE_t + FO$$

Definitions :

FO : total future option cost

O_k : option cost paid by user k

M : total number of users paying option cost

BE_t : current bonus index

BE_{t+1} : updated bonus index

Conclusion

The bonus system and future options operate in the HodlBank ecosystem with the principle of a closed treasury.

- The fund costs of impatient users turn into rewards for patient users.
- Thus, the system becomes sustainable, fair, and investor-friendly.

Future Options

Bronze Package

Definition:

The Bronze package is an option package with a 1-year hodl period designed for short/medium-term users.

Features:

- **Hodl Period:** 12 months
- Users can withdraw their funds at any time.
- No future option cost applies → no additional deduction from the principal in case of early withdrawal.
- In case of early withdrawal, only the bonuses earned up to that date are canceled.
- Patient investors who complete the 1-year period receive a share of 20% of the Bonus Index.

Advantages:

- User-friendly → no loss of principal in early withdrawal
- High access to liquidity
- Ideal for users with low risk preference

Disadvantages:

- Only 20% share from the Bonus Index
- All bonuses are forfeited in case of early withdrawal

Silver Package

Definition:

The Silver package is designed for medium-term investors with a 1-year hodl period. Compared to the Bronze package, it provides higher bonus returns, but a deduction is applied to the principal in case of early withdrawal.

Features:

- **Hodl Period:** Minimum 1 year
- **Future Option Cost:** In case of early withdrawal, 20% of the principal is deducted.
- **Bonus Right:** Users who complete the 1-year period receive a share of 70% of the Bonus Index.

Advantages:

- Much higher bonus compared to the Bronze package (70%)
- High returns for patient users
- Suitable for medium-term investors

Disadvantages:

- 20% deduction from the principal in case of early withdrawal
- All bonuses are forfeited

Gold Package

Definition:

The Gold package is designed for long-term investors with a 2-year hodl period. The highest bonus return is offered in this package, but the highest option cost applies in case of early withdrawal.

Features:

- **Hodl Period:** Minimum 2 years
- **Future Option Cost:** In case of early withdrawal, 40% of the principal is deducted.
- **Bonus Right:** Users who complete the 2-year period receive a share of 100% of the Bonus Index.

Advantages:

- Full access to the Bonus Index (100%)
- Maximum returns for long-term investors
- Strongly supports the hodl philosophy

Disadvantages:

- 40% deduction from the principal in case of early withdrawal
- All bonuses are forfeited

Package Comparison Table

Package	Hodl Period	Future Option Cost	Bonus Index Share	Early Withdrawal Condition
Bronze	1 year	0% (no deduction)	20%	Principal is preserved, but earned bonuses are canceled
Silver	1 year	20%	70%	20% deduction from principal + loss of bonuses
Gold	2 years	40%	100%	40% deduction from principal + loss of bonuses

3. Credit System and Credit Score

Credit Usage Model

Credit facilities are available only to Silver and Gold package users.

- A user can borrow up to 50% of their deposited funds without touching their principal.
- Interest-free, with no processing or file fees.
- Credit term: 14 days.
- Bronze users are not eligible for credit.

Scenario:

- A user with a Silver/Gold package who deposits 1,000 USDT → can borrow 500 USDT credit.
 - A Bronze package user → has no credit rights.
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Repayment and Consequences

- **On-Time Repayment (≤ 14 days):**
 - The credit is closed.
 - No deductions are made from funds.
 - Hodl period and bonus rights continue.
- **Non-Repayment (> 14 days):**
 - The user's credit score decreases.
 - Deductions are applied according to the selected package:
 - **Silver:** 20% deduction from principal
 - **Gold:** 40% deduction from principal
 - Remaining funds after deduction are returned to the user's account.

User Advantages

- Exclusive to loyal hodl Silver and Gold users.
- Interest-free and fee-free credit → user-friendly model.
- Access to liquidity without selling assets.
- Users with high repayment discipline → higher credit scores and better opportunities.

Credit Score Calculation and Uncollateralized Credit

Credit Score Range

The HodlBank credit score is calculated between 0 and 1000.

- **1000** → maximum score (fully reliable)
- **0** → minimum score (most risky)

Credit Categories

Credit Score Range	Category	Description
0 – 399	Risky	User can only access collateralized credit.
400 – 699	Medium Risk	User may access low-limit uncollateralized credit.
700 – 1000	Low Risk	User can access high-limit uncollateralized credit and additional benefits.

$$CS_{t+1} = CS_t + \beta \cdot R_{on} - \gamma \cdot R_{late} + \delta \cdot H$$

Definitions :

CS_t : credit score at time t

R_{on} : on-time payments

R_{late} : late or unpaid debts

H : loyalty to Hodl period (extra points)

β, γ, δ : system coefficients (e.g. $\beta = +10$, $\gamma = -20$, $\delta = +5$)

Uncollateralized Credit

In HodlBank, uncollateralized credit is offered only to reliable user groups under certain conditions.

Rules:

- **Access Time:** The right to uncollateralized credit opens after 2 years for each user.
- **Credit Access:**
 - **Risky (0–399 points):** No access to uncollateralized credit.
 - **Medium Risk (400–699 points):** Access to low-limit uncollateralized credit.
 - **Low Risk (700–1000 points):** Access to high-limit uncollateralized credit.
- **Treasury Limit:** The total amount of uncollateralized credit issued cannot exceed 10% of the Treasury.
- **Purpose:** To prevent delays in repayment rates from affecting HodlBank’s financial structure.

Global Crypto Credit Score Vision

The HodlBank credit score system aims not only to function within its own ecosystem but also to become a global standard—a “World Crypto Credit Score.”

Core Principles:

- **Universal Validity:** The credit score obtained in HodlBank can also be used by financial institutions and crypto banking platforms outside the ecosystem.
- **Transparency:** The scoring algorithm will be verifiable on-chain, ensuring trust for all users.
- **Transferability:** User credit scores can be shared across exchanges, DeFi platforms, and financial service providers.

Proof of Need:

- **Financial Inclusion:** Traditional credit scores exclude 1.7 billion people without access to the banking system (World Bank data). A crypto-based credit score fills this gap.
- **Global Validity:** The borderless nature of crypto assets creates the need for a single, worldwide credit scoring standard.
- **Risk Management:** In DeFi, NFTs, and other crypto products, there is a lack of an objective scoring mechanism to reduce counterparty risk.
- **Transparency:** On-chain verification provides a much more reliable structure compared to traditional credit scores.

Conclusion

The World Crypto Credit Score proposed by HodlBank goes beyond the boundaries of traditional finance by becoming:

- Globally valid,
- Transparent through on-chain verification,
- A system that measures user behavior (hodl, repayment, fund size),

A next-generation financial trust score that can become standard across the entire crypto ecosystem

Comparison: Traditional Credit Scores vs. HodlBank World Crypto Credit Score

Feature / Criterion	Traditional Credit Scores (FICO, Experian, etc.)	HodlBank World Crypto Credit Score
Data Source	Bank records, debt history, income reports	On-chain data, hodl duration, credit repayments
Validity	Varies by country	Universal and verifiable on-chain
Access	Limited to bank customers	Accessible to all crypto users
Transparency	Closed algorithms	On-chain verification and open protocol
Inclusivity	Excludes 1.7 billion unbanked people	Includes users without bank accounts
Risk Management	Measures only fiat debt risk	Also measures crypto asset hodl and repayment behavior
Flexibility	Limited to traditional credit products	Can be integrated with DeFi, staking, NFTs, and other crypto products
Investment Behavior	Not measured	Hodl duration, fund size, patience/early exit behavior considered

4. Tokenomics

Token Definition

- **Token Name:** HodlBank Token (HBT)
- **Blockchain:** To be issued on the Solana (SOL) network
- **Standard:** SPL Token
- **Use Cases:**
 1. Platform-based bonuses and rewards
 2. Governance mechanism
 3. Staking model to increase user loyalty
 4. Access to platform pre-sales and exclusive investment opportunities

Token Supply and Launch

- **Total Supply:** 1,000,000,000 HBT
- **Launch Model:** There will be no direct listing.
- **200-Day Countdown:** An official countdown period of 200 days will be initiated for the token launch. This period will strengthen community growth and ecosystem trust.
- **Distribution Model**

Category	Percentage (%)	Token Amount (HBT)	Description
First 1000 Members Airdrop	40%	400,000,000	The first 1000 members will receive an airdrop proportional to the amount of funds they deposited
Pre-Sale (Platform Members)	40%	400,000,000	Active platform users will be able to participate in the pre-sale proportional to their deposited funds
Reserve & Development	20%	200,000,000	Will remain in HodlBank for emergency fund, development, security, and sustainability

Launch Strategy

- During the 200-day countdown, the HodlBank community will be established.
- During this period, the token will not be listed → preventing early speculation.
- At the end of the countdown, distribution will be carried out through an airdrop + pre-sale model to the community.
- Exchange listings will occur after community distribution is completed.

5. Security and Fund Protection

Security Approach

For HodlBank, security is the cornerstone of the system. A multi-layered security architecture is applied to minimize the risks of loss, hacking, or unauthorized access to funds.

Wallet Architecture

- **Cold Wallets:**
 - 90% of funds are kept in offline hardware wallets.
 - Not connected to the internet → immune to external attacks.
- **Hot Wallets:**
 - 10% of funds are allocated for daily liquidity needs.
 - Small withdrawals are fulfilled instantly.

Withdrawal Policy

- Withdrawals below 10,000 USD: Processed instantly.
- Withdrawals above 10,000 USD: Pass through multi-signature (multi-sig) security approval.
- Large amounts: Additional security layer through manual review and AI-supported risk analysis.

Multi-Signature and Authority Management

- All critical transactions are executed with multi-signature (multi-sig).
- Role-based access control is applied for administrator accounts.
- The system cannot operate based on the mistake or malicious intent of a single individual.

Auditing and Insurance

- Regular penetration tests are conducted by independent security firms.
- An insurance reserve is allocated for HodlBank funds. In case of potential losses, users are guaranteed to recover their assets.

Treasury and Reserve Management

- The 20% reserve allocated in Tokenomics is used exclusively for security, development, and emergencies.
- Reserve funds are kept in separate cold wallets.

Security Philosophy

HodlBank ensures security not only with technical measures but also with incentive mechanisms:

- **Bonus System:** Rewards patient users and discourages speculative exits.
- **Future Option Costs:** Keep the fund pool stable and protect against sudden withdrawal waves.
- **Credit Score System:** Reduces risky user behavior.

Anti-Fraud Measures

To protect user funds, HodlBank implements not only technical security but also fraud prevention mechanisms:

- **KYC & AML Compliance:** Identity verification and anti-money laundering processes are applied for all users.

- **Risk-Based Monitoring:** Large or suspicious transfers are automatically flagged by AI-powered algorithms.
- **Multi-Layered Security:** 2FA (two-factor authentication), device verification, and IP analysis are mandatory for user logins.
- **Fraud Reporting:** Community members can report suspicious transactions through the system.

Fund Traceability

In the crypto ecosystem, fund transfers are fully transparent and recorded on-chain.

- **Transparency Principle:** All transfers made through HodlBank can be verified by anyone via blockchain explorers (e.g., Solscan, Etherscan).
- **Traceability:** Deposited and withdrawn funds by users are recorded on-chain → they cannot be hidden.
- **Anti-Fraud Assurance:** Since transparency takes priority over privacy, funds cannot be lost or transferred without leaving a trace.
- **Treasury Funds:** Funds allocated for reserve and development can also be tracked on-chain in the same way.

Conclusion

By combining anti-fraud measures with fund traceability, HodlBank:

- Safely protects user assets,
- Provides a transparent financial structure,
- Eliminates the risk often cited in the crypto world of “fraud hidden under the guise of privacy.”

6. HodlBank Community Share and Development Share

Future Option Cost Pool

HodlBank manages a pool created from the future option costs paid by users upon early withdrawal.

- **85%** of this pool directly feeds the Bonus Index and increases the rewards of patient users.
- **15%** of the pool is allocated as the Community Share and Development Fund.

Community Share

- A portion of the allocated funds is used to strengthen the HodlBank community.
- Community events, reward programs, referral bonuses, and educational projects are funded from this share.

Development Share

- The other portion is used for technical developments, security improvements, and new product launches.
- In this way, HodlBank both rewards its users and creates a continuously evolving ecosystem.

7. HodlBank Referral System

- **System Definition**

HodlBank encourages community growth with a referral model based on the Bonus Index.

Referral rewards are calculated directly from the current Bonus Index (BE).

- **REFERRAL REWARD CALCULATION:**

$$R_{invite} = 0.10 \cdot BE_t$$

Definitions :

R_{invite} : reference reward

BE_t : current bonus index at time t

Referral Conditions

1. **Investment Requirement:** The referred user must make an investment transaction.
2. **Package Requirement:** The referred user must choose either the Silver or Gold package for the reward to be activated.
 - If the Bronze package is selected → no referral reward is generated.

Multi-Level Referral (Decreasing Rate)

- For each subsequent referral (2nd level, 3rd level, ...), the reward rate is multiplied with a **0.001 decrease**.

8. Exchange Rate Risk and Fund Management

- **Investment and Withdrawal Transactions:** All transactions in HodlBank are carried out exclusively in cryptocurrency. Fiat (traditional currency) is not used.
- **Bonus Payments:** All bonuses paid to users are also made in cryptocurrency.
- **Result:** Thanks to this structure, HodlBank is not affected by exchange rate risks.

Closed Treasury Model

- HodlBank's treasury operates on a closed-fund principle.
- Future option costs and reserves paid by users accumulate in the fund pool.
- This treasury is **not invested or used in risky operations** by HodlBank.

- **Purpose:** To reward only patient investors and ensure system sustainability.

Advantages:

- Independent from external markets and exchange rate fluctuations.
- Funds accumulate in a closed structure for the benefit of users → serving as a “trust vault.”
- HodlBank never uses these funds for its own operations → system security is guaranteed.

9.Conclusion

- **HodlBank is the next-generation financial system that rewards patience, guarantees trust, and builds the future of crypto banking.**

“LIVING IN THE FUTURE BUILDS TODAY...”

Hidden Founder