Analysis of High vs. Low Scoring DeFi Wallets

Behavioural Patterns and Credit Score Justification

Overview

This analysis examines five high-scoring wallets (94-100) and five low-scoring wallets (~69-70) from our Compound V2 behavioural credit scoring system. The stark contrast between these groups reveals clear patterns that justify the scoring model.

High-Scoring Wallet Patterns (94-100)

The top-performing wallets demonstrate several consistent traits:

Wallet Address	Credit Score
0x0f3c2476fbf0ed09dff00ea7f4ef252dcc72e6f1	100.00
0x4654f56a64301b9b582f843f97332d96ead11ff8	99.08
0x0e0ec712b3912b5601216455a158cf18152cb62a	96.58
0xbed4e3cd89918563a9ce4b04cf5379daf566bd53	94.75
0xe20ee1d250c8d3e0bd140306121001bfdc7a1201	94.55

1. **Substantial Capital Commitment**: These wallets typically show high total_deposit_usd values, indicating significant financial commitment to the protocol.

2. **Extended Participation**: High deposit_duration_days metrics suggest long-term engagement, with activity spanning months rather than days or weeks.

3. **Asset Diversification**: These users deposit multiple unique assets, demonstrating sophisticated risk management and deeper protocol engagement.

4. **Zero or Minimal Liquidations**: The highest-scoring wallets have either no liquidation events or very few relative to their deposit volume.

5. **Consistent Activity**: Regular deposit transactions indicate ongoing commitment rather than sporadic participation.

Low-Scoring Wallet Patterns (~69-70)

The lower-performing wallets exhibit contrary behaviours:

Wallet Address	Credit Score
0xf0b22f7e45a223a106c35eda11bd055a70a234dd	69.84
0xd70ad9c99996e46c11e018cb6f7e19c00b592359	69.82
0xd212f73a389966da5f493a302518639ee8296dc8	69.82
0xbb74a74275ca79b0f808c7a03c65e89735c9fc40	69.81
0x18ab13f62635bec69fcc1d2ce3dbe5e0bdef1b99	69.75

1. **Limited Capital Exposure**: These wallets typically show lower total_deposit_usd values, indicating limited financial stake in the protocol.

2. **Short-Term Engagement**: Lower deposit_duration_days metrics suggest brief participation periods, potentially indicating opportunistic rather than committed usage.

3. **Asset Concentration**: These users tend to deposit fewer unique assets, suggesting less diversification and potentially higher risk exposure.

4. **Higher Liquidation Frequency**: More frequent liquidation events relative to deposit activity, showing higher risk-taking behaviour or poor position management.

5. **Irregular Transaction Patterns**: Sporadic deposit activity rather than consistent engagement.

Model Validation

The clear behavioural distinction between high and low-scoring wallets validates our scoring approach:

Parameter	High-Scoring Impact	Low-Scoring Impact
Deposits	Large, consistent deposits build protocol stability	Limited deposits indicate lower commitment
Duration	Long-term participation shows reliable behaviour	Short-term engagement suggests opportunism
Diversity	Multiple assets reduce volatility risk	Concentrated positions increase risk exposure

Parameter	High-Scoring Impact	Low-Scoring Impact
Liquidations	Few/no liquidations indicate responsible borrowing	More liquidations signal poor risk management

Conclusion

This comparative analysis confirms our credit scoring model successfully identifies and differentiates between:

1. **Protocol-Aligned Users**: High-scoring wallets demonstrate behaviours that enhance protocol stability through significant, diversified, and long-term participation with responsible position management.

2. **Higher-Risk Users**: Low-scoring wallets exhibit behaviours that may introduce volatility through limited, concentrated, short-term participation with more frequent liquidation events.

The significant gap between the highest scores (100) and the lower tier (~70) suggests our model provides meaningful differentiation across the user base, enabling effective risk assessment and potential incentive alignment for DeFi protocols.