



Tofu Finance

Smart Contract Security Audit

April, 2021
[TechRate](#)

Disclaimer

This is a limited report on our findings based on our analysis, in accordance with good industry practice as at the date of this report, in relation to cybersecurity vulnerabilities and issues in the framework and algorithms based on smart contracts, the details of which are set out in this report. In order to get a full view of our analysis, it is crucial for you to read the full report. While we have done our best in conducting our analysis and producing this report, it is important to note that you should not rely on this report and cannot claim against us on the basis of what it says or doesn't say, or how we produced it, and it is important for you to conduct your own independent investigations before making any decisions. We go into more detail on this in the below disclaimer below – please make sure to read it in full.

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The analysis of the security is purely based on the smart contracts alone. No applications or operations were reviewed for security. No product code has been reviewed.

Background

TechRate was commissioned by Tofu Finance to perform an audit of smart contracts:

- <https://bscscan.com/address/0x19e506bbf1d8dbd08e963229434634664a577111#code>

The purpose of the audit was to achieve the following:

- Ensure that the smart contract functions as intended.
- Identify potential security issues with the smart contract.

The information in this report should be used to understand the risk exposure of the smart contract, and as a guide to improve the security posture of the smart contract by remediating the issues that were identified.

Issues Checking Status

| № | Issue description. | Checking status |
|----|--|-----------------|
| 1 | Compiler warnings. | Passed |
| 2 | Race conditions and Reentrancy. Cross-function race conditions. | Passed |
| 3 | Possible delays in data delivery. | Passed |
| 4 | Oracle calls. | Passed |
| 5 | Front running. | Passed |
| 6 | Timestamp dependence. | Passed |
| 7 | Integer Overflow and Underflow. | Passed |
| 8 | DoS with Revert. | Passed |
| 9 | DoS with block gas limit. | Passed |
| 10 | Methods execution permissions. | Passed |
| 11 | Economy model. | Passed |
| 12 | The impact of the exchange rate on the logic. | Passed |
| 13 | Private user data leaks. | Passed |
| 14 | Malicious Event log. | Passed |
| 15 | Scoping and Declarations. | Passed |
| 16 | Uninitialized storage pointers. | Passed |
| 17 | Arithmetic accuracy. | Passed |
| 18 | Design Logic. | Medium issues |
| 19 | Cross-function race conditions. | Passed |
| 20 | Safe Zeppelin module. | Passed |
| 21 | Fallback function security. | Passed |

Security Issues

High Severity Issues

No high severity issues found.

Medium Severity Issues

1. Wrong burn

Issue:

There is a wrong burn in function transfer. Two percent burn amount will be subtracted from sender balance and total supply, but will be added to the zero balance. So in this case actual tokens count will be more than total supply.

Recommendation:

Do not add two percent burnable tokens to the zero address.

Low Severity Issues

No low severity issues found.

Owner privileges

- ☐ Owner can change the tax and liquidity fee.
- ☐ Owner can change the tokens per BNB.
- ☐ Owner can withdraw BNBs from the contract.

Recommendations

- ☐ Use IBEP20 interface instead of IERC20.
- ☐ Add ownership transfer events.

Conclusion

Smart contracts contain only medium severity issues.

Techrate note:

Please check the disclaimer above and note, the audit makes no statements or warranties on business model, investment attractiveness or code sustainability. The report is provided for the only contract mentioned in the report and does not include any other potential contracts deployed by Owner.