RugFreeCoins Audit

Olympus Financial Token
Smart Contract Security Audit
March 23, 2022

Contents

Audit details

Audited project
Olympus Finance Token

Contract Address
0x2B1C857036aE196CFd08F37650b08E337b04Efb6

Client contact
Olympus Finance Team

Blockchain
Binance smart chain

Project website
https://olympusfinance.io/

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 disclaimer below – please make sure to read it in full.

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Background

Rugfreecoins was commissioned by Olympus Finance Token to perform an audit of the smart contract.

https://bscscan.com/address/0x2b1c857036ae196cfd08f37650b08e337b04efb6

The focus of this audit is to verify that the smart contract is secure, resilient and working according to the specifications.

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

About the project

Olympus Finance is a token built on the Binance Smart Chain that is with an innovative investment use case the main purpose of which is to seek out constant revenue sources, the first autostaking protocol backed by Defi 3.0 yield farming on BSC. OLYMPUS will bring an unparallel, fixed APY of 164720.66%, the highest of its kind onto the BSC blockchain, while imposing profound ease, simplicity, and accessibility upon all Olympus token holders. Each transaction, purchase incurs 13% fee, and sale incurs a 20% fee.

Features

- **5%** of the buy and **10%** of the sales fees is directed to the RFV which helps sustain and back the Staking Rewards provided by the Positive Rebase.

- The **sustainability fee of 3% when buying and 5% when selling for treasury, which is allocated for marketing** is what allows Olympus Financial to hold the aforementioned promise. Tokens will be swapped into BNB and will be sent to a marketing wallet per transaction. This way, Olympus Financial will have enough funds to promote the coin and spend for future development without selling tokens as the traditional way.

- The additional component included under the sustainability section is a **liquidity fee of 5% when buying and selling**, which is a redistribution mechanism that ensures the trading pool always has sufficient liquidity.

Tokenomics

13% fee when buying

- 5% of trade goes to the liquidity pool.

- 3% of trade goes to the treasury for marketing in BNB.

- 5% of trade goes to the treasury for staking rewards in BUSD.

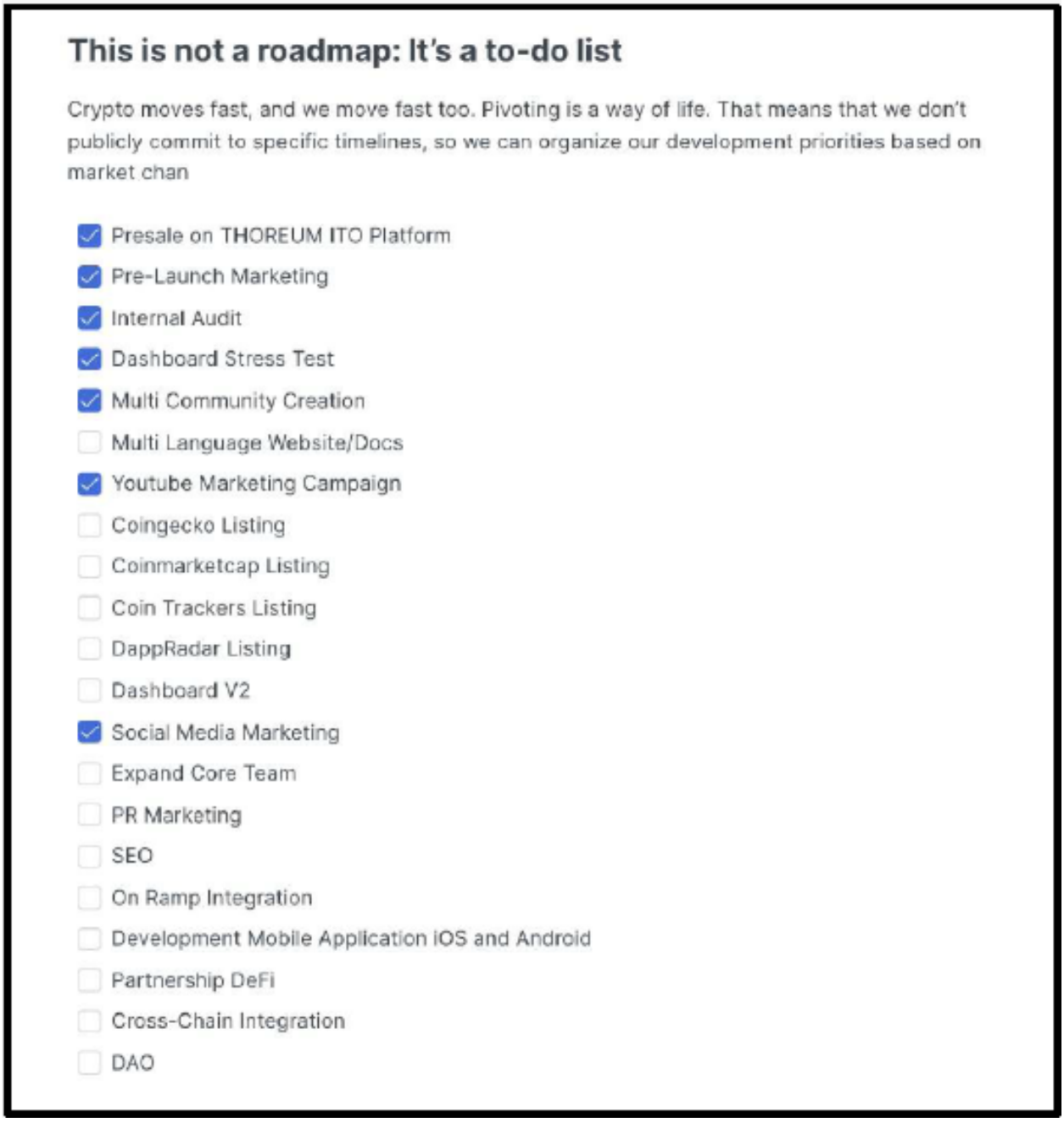
20% fee when selling

- 5% of trade goes to the liquidity pool.

- 5% of trade goes to the treasury for marketing in BNB.

- 10% of trade goes to the treasury for staking rewards in BUSD

Roadmap


This is not a roadmap: It's a to-do list
Crypto moves fast, and we move fast too. Pivoting is a way of life. That means that we don't publicly commit to specific timelines, so we can organize our development priorities based on market chan
Presale on THOREUM ITO Platform
Pre-Launch Marketing
Internal Audit
Dashboard Stress Test
Multi Community Creation
Multi Language Website/Docs
Youtube Marketing Campaign
Coingecko Listing
Coinmarketcap Listing
Coin Trackers Listing
DappRadar Listing
Dashboard V2
Social Media Marketing
Expand Core Team
PR Marketing
SEO
On Ramp Integration
Development Mobile Application iOS and Android
Partnership DeFi
Cross-Chain Integration
DAO

Target market and the concept

Target market

- ❖ Anyone who's interested in the Crypto space with long-term investment plans.
- ❖ Anyone who's ready to earn a passive income by holding tokens.
- ❖ Anyone who's interested in trading tokens.
- ❖ Anyone who's ready in receiving automatic staking and compound rewards every 30 minutes.
- ❖ Anyone who's interested in receiving fixed interest of 2.02% per day or 158,893.59% per year.
- ❖ Anyone who's interested in taking part with Olympus play and earn rewards.
- ❖ Anyone who's interested in taking part with the future plans of the Olympus Financial token.
- ❖ Anyone who's interested in making financial transactions with any other party using Olympus Financial as the currency.

Core concept

Reward mechanism

5% of all buy & 10% of all sales go to the RFV farming/buyback wallet. But the funds in this wallet don't just sit there.

The funds are bridged to other EVM-compatible blockchains - like Avalanche, Fantom, Solana, Metis, Polygon, etc. to farm at the highest APY farms and the profit returned to the RFV fund. **So, the RFV fund will grow exponentially with at least 50% additional value a year.**

Buybacks & Burn function will use this RFV fund to support the Olympus' price.
Previous buybacks can be viewed on the "Buyback History" panel in the dashboard.
During a buyback, $OLM tokens are bought back, paired with $BNB, and "burnt" to the $OLM/$BNB PancakeSwap V2 liquidity pool.

This not only increases the token price, but it also increases the pair's liquidity.

There are two major accomplishments here:

1. Holders no longer need to always keep up with the latest and greatest farm across all these different blockchains. They can just buy the tokens, relax, hold, and reap the earnings via 2.02% daily reward or a compounding 158,893.59% APY and buybacks from farming rewards.

2. When the price falls after a sell, 10% of the sale will be invested in aggressive yield farms that will be used for a future and powerful **compounded buyback.**

Sustainable mechanism

The **sustainability fee of 3% when buying and 5% selling for treasury that allocated for marketing** is what allows Olympus Finance to promote the token and use funds to further the development of the platform. Tokens will be swapped into BNB and will be sent to a marketing wallet per transaction. This way, Olympus Finance will have access to the funds without selling tokens as the traditional way, which will enable them to consume funds without hurting the project.

The liquidity fee of 4% when buying and selling, which is a redistribution mechanism that ensures the trading pool always has sufficient liquidity.

The use cases

With 4% burn of total supply every week, OLYMPUS' total supply will constantly be deflating against your balance, while your balance is constantly increasing against OLYMPUS' total supply. This built-in mechanism creates a true supply/demand metric to the OLYMPUS token as it becomes ever scarcer against your balance with time.

In simple words, if you just hold OLYMPUS, your share of total market cap will ever-increasing. Even if market cap is not grow, the USD value of tokens in your wallet will still be growing. So just by holding OLYMPUS in your wallet, you will reap the exponential rewards of triple effect:

1. Your token amount grows 2.02% / day & compounding to 158,893.59% a year.

2. Your total token value in USD will grows as your shares/total Market cap increase because of 4% supply burned every week.

3. OLYMPUS' Market cap grow bigger when new investors come, but your shares/total Market cap is not declining but ever growing, your total token value in USD will further increase.

Olympus Play

Participants deposit their **$OLM** tokens into Olympus P.L.A.Y. for a chance to win a prize of more $OLM using the Olympus V2 app on the website. Simply press the Olympus P.L.A.Y. button and follow the easy directions. Your tokens never leave your wallet, and you can enter and leave a contest at any time.

Although the foundations of PLAY and PLSA are the same, Olympus P.L.A.Y. improves on the PLSA model, because everyone who participates continue to earn $OLM staking rewards with a different but still very high ratio. Those who enter more $OLM have an increased odds of winning the big prize, and once you enter you are automatically entered in every new prize pool until you withdraw your tokens. There is an EARLY EXIT FEE of 10% decreasing for the first 10 days you stay entered. So if you deposit and withdraw the same day, you will pay 10% of the Olympus tokens you deposited to enter the contest. This decreases by 1% over the next ten days.

The amount of the prize pool per contest is determined by the amount of $OLM deposited. More tokens deposited into Olympus P.L.A.Y. means a higher grand prize!

Winners are determined by random draw with those depositing more $OLM having a greater odd of winning

Potential to grow with score points

1.	Project efficiency	9/10
2.	Project uniqueness	9/10
3.	Information quality	10/10
4	Service quality	10/10
5	System quality	10/10
6	Impact on the community	10/10
7	Impact on the business	10/10
8	Preparing for the future	10/10
	Total Points	**9.75/10**

Contract details

Token contract details for 23rd March 2022

Contract name	Olympus Financial
Contract address	0x2B1C857036aE196CFd08F37650b08E337b04Efb6
Token supply	5,000,000,000
Token ticker	OLM
Decimals	18
Token holders	1
Transaction count	1
Risk free value receiver	0x12926a1f66AdA6355Eaa69131B34Bd2B84115650
Treasury receiver	0x7E0eCfdB489707B243079C778023cB64F9d4e0EE
Contract deployer address	0x8921084612b32aA802f1B4c7674D309baf350b7e
Contract’s current owner address	0xe9e7CEA3DedcA5984780Bafc599bD69ADd087D56

Contract code function details

No	Category	Item	Result
1.	Coding conventions	BRC20 Token standards	pass
		Compile errors	pass
		Compiler version security	pass
		visibility specifiers	pass
		Gas consumption	pass
		Safe Math features	pass
		Fallback usage	pass
		Tx. Origin usage	pass
		deprecated items	pass
		Redundant code	pass
		Overriding variables	pass
2	Function call audit	Authorization of function call	pass
		Low level function (call/delegate call) security	pass
		Returned value security	pass
		Self-destruct function security	pass
3	Business security	Access control of owners	pass
		Business logics	pass
		Business implementations	pass
4	Integer overflow/underflow		pass
5	Reentrancy		pass
6	Exceptional reachable state		pass
7	Transaction ordering dependence		pass
8	Block properties dependence		pass
9	Pseudo random number generator (PRNG)		pass
10	DoS (Denial of Service)		pass
11	Token vesting implementation		pass
12	Fake deposit		pass
13	Event security		pass

Contract description table

Below table represents the summary of the contracts and methods in the token contract. We Scanned the whole contract and listed down all the Interfaces, functions and implementations with its visibility and mutability.

Contract	Type	Base		
L	Function Name	Visibility	Mutability	Modifiers
SafeMathInt	**Library**			
L	Mul	Internal		
L	Div	Internal		
L	Sub	Internal		
L	Add	Internal		
L	Abs	Internal		
IERC20	**Interface**	External		No
L	totalSupply	External		No
L	balanceOf	External		No
L	allowance	External		No
L	transfer	External	*	No
L	approve	External	*	No
L	transferFrom	External	*	No
SafeMath	**Library**			
L	Add	Internal		
L	Sub	Internal		
L	Sub	Internal		
L	Mul	Internal		
L	Div	Internal		
L	Div	Internal		
L	Mod	Internal		
InterfaceLP	**Interface**			

L	sync	External	*	No
Roles	**Library**			
L	add	Internal	*	
L	remove	Internal	*	
L	has	Internal		
MinterRole	**Implementation**			
L		Public	*	No
L	isMinter	Public		No
L	renounceMinter	Public	*	
L	_addMinter	Internal	*	
L	_removeMinter	Internal	*	
ERC20Detailed	**Implementation**			
L		Public	*	No
L	name	Public		No
L	symbol	Public		No
L	decimals	Public		No
IDEXRouter	**Interface**			
	factory	External		No
	WETH	External		No
	addLiquidity	External	*	No
	addLiquidityETH	External	□	No
	swapExactTokensForTokensSupportingFeeOnTransferTokens	External	*	No
	swapExactETHForTokensSupportingFeeOnTransferTokens	External	□	No
	swapExactTokensForETHSupportingFeeOnTransferTokens	External	*	No
IDEXFactory	**Interface**			
	createPair	External	*	No

Ownable	**Implementation**			
L		Public	*	No
L	owner	Public		No
L	isOwner	Private	*	
L	renounceOwnership	Public	*	onlyOwner
L	transferOwnership	Public	*	onlyOwner
L	_ transferOwnership	Internal	*	
OlympusToken	**Implementation**	**ERC20Detailed, Ownable, MinterRole**	*	
L		Public	□	ERC20Detailed
L		External		No
L	totalSupply	External		No
L	allowance	External		No
L	balanceOf	Public		No
L	checkFeeExempt	External		No
L	checkSwapThreshold	External		No
L	shouldRebase	Internal		
L	shouldTakeFee	Internal		
L	shouldSwapBack	Internal		
L	getCirculatingSupply	Public		No
L	getLiquidityBacking	Public		No
L	isOverLiquified	Public		No
L	manualSync	Public	*	No
L	transfer	External	*	validRecipient
L	_ basicTransfer	Internal	*	
L	_ transferFrom	Internal	*	
L	transferFrom	External	*	validRecipient
L	_ swapAndLiquify	Private	*	
L	_addLiquidity	Private	*	

L	_addLiquidityBusd	Private	*	
L	_swapTokensForBNB	Private	*	
L	_swapTokensForBusd	Private	*	
L	swapBack	Internal	*	swapping
L	takeFee	Internal	*	
L	decreaseAllowance	External	*	No

Security issue checking status

❖ **High severity issues**

No high severity issues found.

❖ **Medium severity issues**

No medium severity issues found.

❖ **Low severity issues**

No low severity issues found.

❖ **Informational**

- **Owner can change max sell amount without any limitation**

```
ftrace | funcSig
function setMaxSellTransaction(uint256 _maxTxn⬆) external onlyOwner {
    maxSellTransactionAmount = _maxTxn⬆;
}
```

- **Owner can set initialDistribution value any time**

```
ftrace | funcSig
function setInitialDistributionFinished(bool _value⬆) external onlyOwner {
    require(initialDistributionFinished != _value⬆, "Not changed");
    initialDistributionFinished = _value⬆;
}
```

- **Owner can withdraw all BNB and BEP20 tokens in the contract.**

Owner privileges

❖ Owner can call rebase and mint a number of tokens maximum up to 340,282,366,920,938,463,463,374,607,431,768,211,455. But this number will be distributed to all holders, owner cannot mint to any wallet they want.

❖ Owner can enable/disable initial distribution.

❖ Owner can exclude wallets from fees. (fees excluded wallets will also exclude from max sell limit and they can trade when trading is disabled).

❖ Owner can change liquidity adding point (by default this value is set to 50%, means liquidity will add only if liquidity value is less than 50% of circulating supply).

❖ Owner can enable/disable swapping and can change swap threshold (buy default this value set to 0.001% from the total supply).

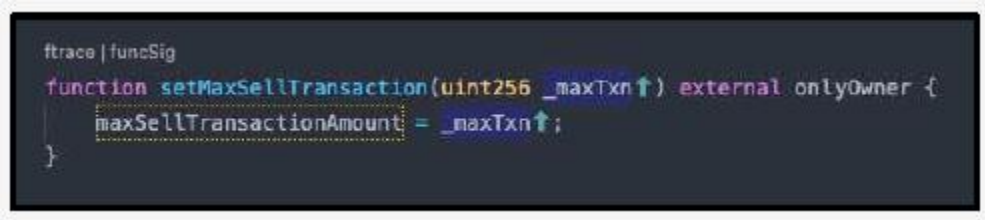
❖ Owner can change all fee receivers.

❖ Owner can change all fees, each fee maximum up to 20% and total buy fees maximum up to 25% total sell fees can set maximum up to 65%.

```
ftrace | funcSig
function setFees(
    uint256 _liquidityFee⬆,
    uint256 _riskFreeValue⬆,
    uint256 _treasuryFee⬆,
    uint256 _sellFeeTreasuryAdded⬆,
    uint256 _sellFeeRFVAdded⬆,
    uint256 _feeDenominator⬆
) external onlyOwner {
    require(
        _liquidityFee⬆ <= MAX_FEE_RATE &&
            _riskFreeValue⬆ <= MAX_FEE_RATE &&
            _treasuryFee⬆ <= MAX_FEE_RATE &&
            _sellFeeTreasuryAdded⬆ <= MAX_FEE_RATE &&
            _sellFeeRFVAdded⬆ <= MAX_FEE_RATE,
        "wrong"
    );

    liquidityFee = _liquidityFee⬆;
    buyFeeRFV = _riskFreeValue⬆;
    treasuryFee = _treasuryFee⬆;
    sellFeeTreasuryAdded = _sellFeeTreasuryAdded⬆;
    sellFeeRFVAdded = _sellFeeRFVAdded⬆;
    totalBuyFee = liquidityFee.add(treasuryFee).add(buyFeeRFV);
    totalSellFee = totalBuyFee.add(sellFeeTreasuryAdded).add(
        sellFeeRFVAdded
    );
    feeDenominator = _feeDenominator⬆;
    require(totalBuyFee < feeDenominator / 4);
}
```

❖ Owner can change max sell transaction without any limitation.



```
ftrace | funcSig
function setMaxSellTransaction(uint256 _maxTxn⬆) external onlyOwner {
    maxSellTransactionAmount = _maxTxn⬆;
}
```

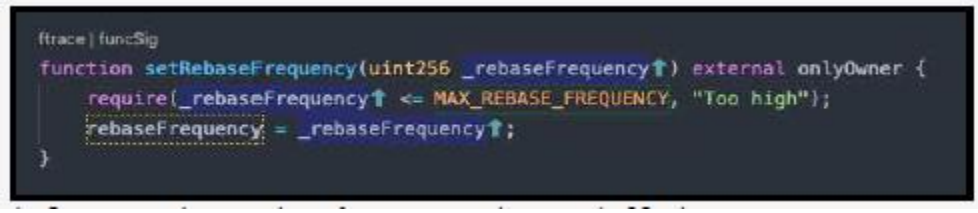
❖ Owner can withdraw all BNB and bep20 tokens in the contract.

```
ftrace | funcSig
function clearStuckBalance(address _receiver⬆) external onlyOwner {
    uint256 balance = address(this).balance;
    payable(_receiver⬆).transfer(balance);
}

ftrace | funcSig
function rescueToken(address tokenAddress⬆, uint256 tokens⬆)
    external
    onlyOwner
    returns (bool success⬆)
{
    return ERC20Detailed(tokenAddress⬆).transfer(msg.sender, tokens⬆);
}

ftrace | funcSig
```

❖ Owner can enable/disable auto rebase (by default this is disable)



❖ Owner can change rebase frequency maximum up to 30 min.

❖ Owner can change rewardYield value (when auto Rebase enable new tokens will mint according to these value)

❖ Owner can enable/disable fees on normal transfers.

❖ Owner can change lP pairs if this value is true liquidity will add in BNB and if false lP will add in BUSD.

❖ Owner can manually change next auto rebase time.

Audit conclusion

While conducting the audit of the Olympus Financial smart contract, it was observed that there is nothing alarming with the code and it contains informational concerns since the owner has substantial control within the ecosystem.