

Rating
6/10 ★



Snapshot	
Ticker	RBN
Current Price:	\$3.01
Market Cap:	\$153,620,446
Circulating Supply:	51,238,435
Token Type:	ERC-20
Sector:	DeFi

Executive Summary

Ribbon Finance is a unique protocol that helps users gain access to structured financial instruments within the DeFi space. What are these “structured” instruments you ask? Well, Ribbon uses a combination of options, futures, and fixed-income strategies to improve a portfolio’s risk-return profile. What makes Ribbon so exciting is that it looks like they are shaping up to be one of the leaders within the next big wave in DeFi: derivatives.

Ribbon got its name in conjunction with a ribbon on a box. They provide a complex investing strategy in an out-of-the-box format. The simplistic user experience “ties” everything together, just like a ribbon on a box by using the protocol’s core product, Theta Vaults (which we will go into detail later).

Ribbon was initially built on the Ethereum blockchain with the intent of being platform-neutral, meaning that they will continue to expand to other blockchains. They are currently the second biggest options protocol in DeFi, relative to the Total Value Locked (TVL). DeFi options are still a relatively small market, but if the derivatives market grows like we at UpNow think it will, Ribbon can

provide a great investment opportunity through both their RBN token and their actual products. Before discussing any of that, we should first understand what exactly options, the financial derivative behind Ribbon’s products, are.

What Are Options?

Options are a type of financial derivative that plays a much more significant role in more developed markets, like the US stock market, than in crypto...for now. However, the potential for these instruments to find an expanded role in crypto markets makes them important to understand, at least at a basic level.

An option is simply an agreement between a buyer and a seller for the right to buy or sell a stock (or token) at a given time for a given price. This is a mouthful at first; it’s easier to understand through examples. There are two types of options - calls and puts - so we’ll run through an example of each, using BTC as an example.

A call option gives the call buyer the right to buy the underlying asset (BTC) at a specific price on a certain date. Say BTC is trading at \$45,000, but you think it will rise to over \$50,000 by the end of January. One option is to purchase some BTC and profit if it goes up; however, this requires you to use/risk a lot of capital at once. Another way you could express this bullish view is by purchasing a call option that expires at the end of January and has a \$50,000 “strike price”. What this means, in practice, is that you’ll be paying a fee (called the “premium”) for the right to purchase BTC at \$50,000 per BTC at the end of January; rather than buying BTC outright, you’re paying a smaller fee for the right to buy BTC at \$50,000 per BTC at the end of January. Since BTC is currently trading at \$45,000, you basically have to decide if the premium you’ll pay for the call option justifies the probability

that BTC breaks upwards to over \$50,000 by the end of January.

If the price of BTC, at that point, is over \$50,000, you'll be able to buy it at \$50,000 and book a profit. If it's lower than that, you'll lose the premium you paid for the option (which, still, is significantly less than purchasing an entire Bitcoin and holding it all month). The person who sold the call, in that case, would profit from the premium you paid and not have to sell you any BTC.

A put option works just the opposite. Say BTC is trading at \$45,000 but, this time, you have a bearish view. You could buy a put option with a \$45,000 strike price and an expiration at the end of January. This, rather than giving you the right to *buy* BTC from the option seller at the end of January, gives you the right to *sell* BTC at \$45,000 at the end of January. So, if the price drops to \$30,000 by then, you still have the right to sell BTC at \$45,000 because of your purchased put option.

In practice, things can get a bit more complicated. Depending on the type of option, you can exercise your options early or sell them to someone else for a profit if the price begins moving your way, as the option buyer, even before expiration. Additionally, the pricing of options is traditionally dependent on various parameters called Greeks. When you hear someone discuss options, you'll often hear terms like Delta, Gamma, Theta, etc. These are all parameters that determine an options pricing, but, for the sake of brevity, we'll leave them out of this report.

Team Analysis

Ribbon Finance was founded by two ex-Coinbase software engineers, Julian Koh and Ken Chan. Koh was an early developer of Coinbase staking, but eventually left to start

Ribbon. Chan attended Lancaster University, a top education academy in the UK, and majored in computer science. In summary, both are very experienced, but young engineers.

Ribbon Finance released an airdrop of their tokens on May 25, 2021 and unfortunately, there was some drama behind it all. Early members of the community noticed a number of wallets that were creating dozens of additional fake wallets, claiming the tokens, and immediately selling them for profit. It was reported the protocol lost over \$2M because of this. At first, many voiced their opinion on it being an inside job, and to their defense, it was quite suspicious. Although we will never know the full story behind the situation, we believe there was no foul play. Julian Koh released a statement on Twitter regarding the matter and in our eyes, it seemed sincere. The entire issue has sparked conversation around on-chain ethics and how to protect against malicious individuals.

Ribbon Theta Vaults

Theta Vaults are Ribbon's core product and currently the only one they offer (for now). So, what are these Theta Vaults? They are the products that run the automated options selling strategies. These strategies earn yield on a weekly basis through writing out-of-the-money options and collecting the premiums. The simplicity is what makes this concept so exciting. Users just deposit their assets into a smart contract and it will automatically start running a specific options scheme. Deposit, wait for yields, withdraw. That is essentially the entire process.

There are two different strategies that the vaults use: **covered call** strategy and the **sell put** strategy. Let's dive into both of these concepts to fully understand how the protocol generates yield.

Covered Call Strategy

A covered call is selling out-of-the-money (OTM) call options, while simultaneously owning the underlying asset. It is typically seen as a neutral to bullish strategy due to the maximum potential profit being capped. It is a way to generate income for those who believe asset prices are unlikely to rise much further in the near term. This strategy is most profitable when the owned asset moves up to the strike price, and the sold OTM call expires worthless. This is because the investor generates the profits from the increase in price from the owned asset, and the entire premium is collected from the expired call option. In **Figure 1**, the underlying asset is ETH.

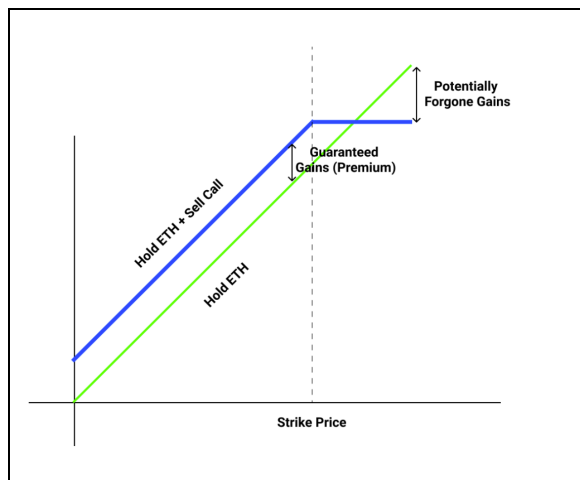


Figure 1 taken from the official Ribbon Documents page found [here](#).

If the underlying asset rises above the strike price and the OTM call expires in the money, you lose out on the gains that went above the strike price.

Put Selling Strategy

Selling a put takes a similar neutral to bullish strategy, but with different mechanics. This strategy generates the most profit when the option expires worthless because the writer of the put receives the full premium. Let's work this out with an example that aligns with the data in the *What are Options?* section. In the example, the strike price is \$50,000 for BTC. If BTC closes above \$50,000, the put option expires worthless and the put writer collects the full value of the premium. If BTC expires in-the-money and between the strike price minus the premium paid (\$50,000 - premium), the put writer collects some of the premium but not the entire amount. The final leg of this strategy deals with the price of BTC expiring below that strike price minus the premium metric. That is when the put seller loses money. **Figure 2** shows a visual of the potential profits and losses from selling a put.

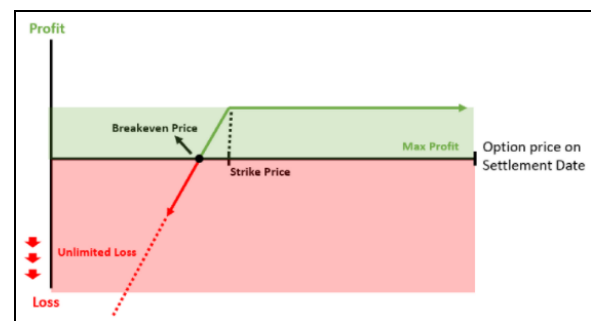


Figure 2 taken from this [blog](#).

Let's move on from the strategies and get back to the vaults. **Figure 3** shows an image of two of the vaults on the protocol. The vault on the left requires AAVE for deposits, and boasts a current potential to earn 49.26% APY. The vault on the right requires AVAX as a deposit and has a 24.18% APY. The user interface for these vaults are quite eye-friendly and if you click on the specific one you want to participate in, it provides a snapshot of the current percentage the strategy is up or down, a profit calculator that allows you to plug in certain strike prices for reference, the vault's individual performance last week, and the vault activity. All of this data

is essential for the participant to fully grasp the concept, and it is fairly easy to navigate in our opinion.

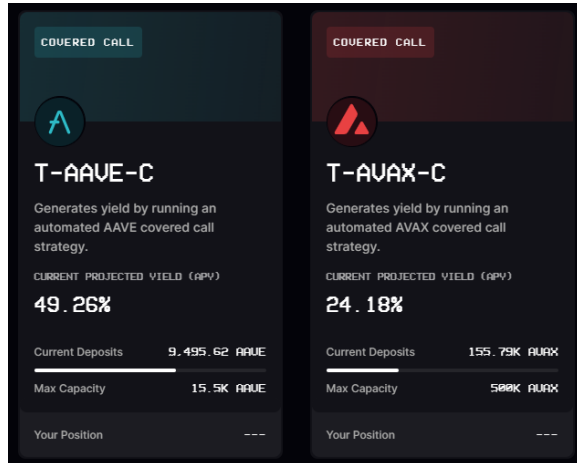


Figure 3 taken from the official [website](#).

Opyn Partnership

Ribbon has a synergistic relationship with Opyn, an on-chain options marketplace, and the Theta Vaults rely on Opyn oTokens (a.k.a. option tokens). Opyn is a protocol that allows users to buy, sell, and create options on ERC20 tokens. These oTokens are ERC20 token representations of an options contract, where each individual coin has a strike price and expiration date. So, theoretically that means if a user owns an oToken, they own an options contract.

The Theta Vaults use the investor's deposited funds to mint oTokens and lock collateral into the Opyn protocol, and then sell the tokens at a premium. Minting the tokens allows for the Vault to run an options-writing strategy and short the oTokens. The collateral locked is used to pay off oToken holders, if indeed the options expire in the money. Remember, Ribbon Finance only sells out-of-the-money contracts, so when the contracts expire in the money, they lose out.

Ribbon Treasury

The brains behind Ribbon Finance had an idea to start a private vault built specifically for DAO treasuries. What is the purpose for this? Well, let's take a look at DAO treasuries first. There are many DAOs out there that are sitting on millions of dollars of their native token, and the majority of them have no way of generating yield on them. Covered calls allow them to generate income through the premiums collected, where if they did not do this strategy, the coins would be sitting stagnant and not producing any additional income. Another benefit to the DAOs would be instead of selling tokens to diversify the treasury, the DAOs can collect the premiums in stablecoins by writing covered calls on their native token. The third benefit for DAOs to participate is because the risk reward for using these covered calls is well worth it. If the native token stays within the price range, the premium collected is theoretically free. If the token expires in the money, the DAO loses out on some of the upside which is a reasonable risk-reward situation because of the significant amounts of tokens the protocol already owns. By participating in the Ribbon Treasury, it allows the DAOs to generate income on their own tokens, while building a healthy diversified portfolio of assets. You can think of this as what Olympus Pro is to OlympusDAO, but modified to be Ribbon's version.

So, what exactly is the Ribbon Treasury? Custom strategies for each DAO is something that is fascinating. DAOs can personally choose how aggressive they want to be with their option strategies. Strike prices, expiry dates, and currencies the DAO wants to receive premiums in, are all determined based on their goals and how much risk they want to endure. Obviously the more aggressive they are, the higher the yield possibilities but it all comes down to how risk averse the DAO is.

What is stopping the DAOs from just doing these strategies themselves and not collaborating with Ribbon? Ribbon has strong connections with some of the biggest crypto option market makers (i.e. QCP, Alameda, GSR, Wintermute, etc.) and in order to participate in these strategies, there needs to be someone to take the opposite side of options. This is why Ribbon is of use. The protocol coordinates market makers to trade with the vaults and take the sides the DAOs aren't on.

Benefits for Ribbon

The Ribbon Treasury benefits the protocol in two ways. The first being the sticky TVL reason. If protocols decide to integrate and use the treasury, there is a strong possibility that they will stay and continue to use it. With retail investors, trader philosophy plays a big role in how long they use protocols and their products. Ribbon expects the sticky TVL to contribute to long-term recurring revenue for the protocol, because this is not for retail traders, but for large protocols. The second benefit is due to the DeFi 2.0 narrative. Ribbon thinks that due to this narrative being relatively hot right now, that they can be a major player in this space because of their ability to create sustainable liquidity for other protocols.

Ribbon vs Dopex

Now that we know a lot about Ribbon, let's compare it to another fast-growing player in the DeFi options space: Dopex. Dopex stands for "decentralized options exchange", and they have their own token as well: DPX. DPX currently has a market cap about 2.5x greater than RBN, and Dopex's TVL of roughly \$500 million is also higher than Ribbon's roughly \$200 million TVL. There are three main topics of interest for comparing these two projects: products, tokenomics, and future plans.

Products

The main difference between Ribbon and Dopex can be seen in their actual products. Ribbon is a structured product that, weekly, uses funds deposited into Theta Vaults to generate yield for depositors by selling calls and puts. Ribbon supports the deposit of tokens like stETH, Aave, USDC, ETH, AVAX, and WBTC. Ribbon currently does not offer option buying, nor do they offer a place for others to purchase options directly. For Ribbon, it's all about earning yield by selling options; this structured product earns them a 2% annualized management fee and a 10% performance fee.

Unlike Ribbon, Dopex actually allows anyone to come in and purchase options. Dopex's main product is their SSOVs - single staking option vaults. Just like Ribbon's Theta Vaults, users can come here and deposit assets (like DPX, rDPX (discussed soon), ETH, or gOHM) to earn yield from selling options. However, rather than allowing the vault to algorithmically sell options for you, you actually choose your strike price to sell at. Users can then come in and purchase these call or put options, paying the premium to the SSOV stakers who sold the options. Dopex also typically uses monthly, rather than weekly, strikes.

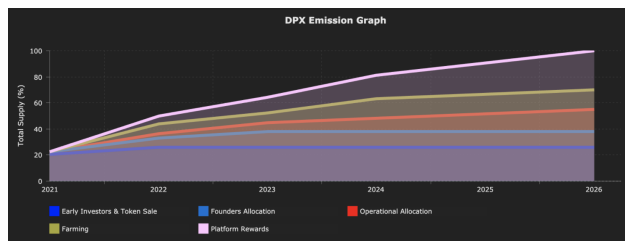
Another feature that Dopex has added to minimize losses for liquidity providers (LPs, which are option sellers) is the rDPX token, which serves as a rebate token for these option sellers. Option sellers whose options are exercised, meaning that the seller lost out on some gains as the option buyer was able to exercise his or her option, get up to a 30% rebate paid in newly minted rDPX tokens. To keep this token liquid and useful, it will be able to be used for LP farming to earn more DPX, as collateral in the future to leverage positions, and potentially to pay fees or boost rewards when staking.

Overall, Dopex and Ribbon offer similar, but not identical, products. Ribbon is set up more like

an extremely easy-to-use structured product for more risk-averse investors who still want to earn yield, while Dopex seems to cater a bit more to “degens” by allowing options sellers to choose their own strikes (determine their own risk) and even come in and purchase options. However, it’s obviously up to the user on how he or she uses the products - I’m just generalizing. In our opinion, both protocols can succeed simultaneously; each runs differently, internally, and each offers different advantages depending on what you’re looking for.

Tokenomics

In terms of tokenomics, DPX, as mentioned earlier, currently has over twice the market cap of RBN. Both projects are still releasing new tokens into their supply. For DPX, this largely comes in the form of a 2-year long liquidity mining program, which constantly puts more DPX into the supply. However, DPX’s [supply schedule](#) doesn’t look too bad; we’ve just reached the point where the rate of emissions is slowing.



We can see that about half the DPX supply is now emitted. RBN, on the other hand, is currently doing no liquidity mining (though they have in the past), meaning that the roughly 20% yields on their option vaults do not include any RBN rewards, and there is no way to stake RBN. However, RBN’s future emissions look much worse; a much smaller amount of the total supply for RBN, relative to that of DPX, is circulating right now, which means that much more will be released over the coming years. Tokenomics-wise, it looks like DPX is currently in a better spot.

Unlike Ribbon, users who stake DPX are entitled to fees collected by the platform. Fees from users purchasing options, swapping options, or exercising options are all directed back to DPX stakers as yield, as well as to SSOV depositors and to some other use-cases. As of right now, none of Ribbon’s fees go back to RBN holders.

Future Plans

Both Ribbon and Dopex have big plans for 2022 and beyond. In addition to possibly expanding to more chains (Ribbon is currently on Ethereum and Avalanche, Dopex is on Arbitrum), new token models and products are on the horizon. We’ll go over a couple major developments here.

Both Ribbon and Dopex are going to implement “vote locking” token models. This means that token holders who agree to stake their tokens, which will lock them up for a period of time, will be able to boost their rewards by voting on which vault (Theta Vault for Ribbon, SSOV for Dopex) will receive the most RBN or DPX rewards. Since RBN and DPX stakers will be able to control which vaults get rewarded most, users and/or protocols will be more incentivized to purchase these tokens and lock them up to get voting power. Many other protocols have taken up this token model as well lately, and it’s proven to be a strong model. Plus, this could help RBN’s problem of high emissions by increasing demand for RBN and allowing holders to vote on which vaults get many of those emissions directed to. If you see anything about veRBN or veDPX, it’s referring to staked/locked tokens.

A major protocol that already employs this token model is Curve, a decentralized exchange for stablecoin swaps (soon expanding to other swaps) that controls over \$23 billion of total value. Since CRV holders who lock up their CRV are able to vote on where most CRV rewards are directed to, many other protocols have begun

competing to accumulate as much CRV as they can to control these CRV rewards and earn more (this competition has been dubbed the Curve wars). The amount of CRV rewards for each pool helps determine the interest rate for that pool, and CRV stakers' votes change these.

Why is this relevant here? Because, in Q1 2022, Dopex is introducing their "Redacted Vaults", which have been revealed to be SSOVs for Curve interest rates. Anyone will be able to buy and sell weekly options that act as bets on the interest rates of specific Curve pools; DPX stakers will be the ones who select which pools to open option vaults for. This could further drive demand for DPX as protocols can buy DPX, stake/lock it, and ensure the Curve pool they utilize has an SSOV ready for it. Plus, they could direct more DPX rewards to the specific pool(s) that they utilize to earn even more.

These will add some very interesting dynamics to the Curve wars: users can bet on the change of interest rates for a specific pool, protocols or users can hedge their risk of assets deposited in Curve seeing their interest rate drop, and protocols with high control of Curve voting power could buy or sell options and then vote to move the rates the way they want to. Suddenly, options may begin playing a large role in the Curve wars.

Overall, in 2022 and beyond, both Ribbon and Dopex will continue to expand their offerings - Dopex is planning to add SSOVs for protocols that request it (Frax and Abracadabra have been mentioned), their own stablecoin, and [automated strategies](#) like Ribbon has. Ribbon will likely expand to more chains and add permissionless vaults (anyone can create a vault with any asset), among other changes. Both will see token models change, as mentioned above.

Other players in the growing DeFi options space include Lyra, Friktion, Katana, Chest, and PsyOptions, though Ribbon and Dopex look to

have taken an early lead in the space. The composability of these projects, specifically, is one reason to get excited about DeFi options. In addition to allowing users to earn juicy yields or speculate on price movements, DeFi options will allow protocols to integrate them to hedge treasury risk, earn yields, start their own vaults, and implement even more creative strategies that we haven't thought of yet, all in both bull or bear markets.

One last difference worth noting: the Dopex founders/team is largely anonymous but well-known in the DeFi space. Major Dopex participants include [TzTok-Chad](#), who came up with the idea in 2018, [Tetranode](#) (who actually advised the Tokenomics for the protocol), and [DeFiGod](#).

Rating Analysis

We at UpNow believe that RBN is a great protocol, especially with the upcoming derivative narrative. We did, however, find some flaws, and we think there may be better options (pun intended). There are three major risks to note: smart contract risk, competition, and regulations.

Smart contract risk can be applied to many protocols, but it obviously has to be mentioned here. Ribbon's smart contracts have so far held up strong, but, especially with the more complex nature of an options protocol, this is always a risk to keep in mind. The second risk we found is competition. The crypto options space, in both DeFi and centralized settings, is still on the come up. There are dozens of protocols that have ties to the sector, including big-name players like Deribit, FTX, Ledger X on the centralized exchange side of things. The decentralized participants are still popping up, and Ribbon will have to fight for market share - on the bright side, Ribbon and Dopex are two of the current largest DeFi options protocols and

have been widening their lead in the last couple weeks.

The third risk, and the most important in our eyes, is regulations. Options are notoriously dangerous for unsophisticated traders, and, if governments step in and implement harsh laws around DeFi protocols, the protocol may lose users and revenue. As mentioned before, the team is publicly known; it would not be very hard for regulators to target them if need be. This is a fairly obvious risk when you think about DeFi in general, but, given the nature of options and their potential to blow up people's accounts who don't understand them very well, it's worth noting. However, regulators also allow pretty much anyone to open a Robinhood account and trade options as much as their heart desires, so maybe this risk is overstated.

For these reasons, we decided to give Ribbon a 6/10 rating. It is a solid project and, with the automated strategy in place, it is a unique concept that should find success in the DeFi industry, especially as investors become hungrier for stable yields. Ribbon's tokenomics issues, however, are certainly something to look out for and, again, the crypto options space is still young. Ribbon has tremendous upside, but it's risky enough to warrant a 6/10 rating.

We also believe that Dopex is a better investment at the current moment. If we were doing a comparative analysis on both (which we sort of did above), we would have to give Dopex an 8/10. Overall, both projects are in the space that has the potential to blow up soon, but we think that there will only be a handful of legitimate players. Only time will tell to see who comes out on top.

How to Buy

You can buy RBN on Coinbase or gate.io, or you can use Uniswap, a decentralized exchange on Ethereum, to swap ETH for RBN. DPX can be

purchased by swapping ETH for DPX on Sushiswap on the Arbitrum Network - to access this, you'd have to bridge ETH over from Ethereum. [Here's](#) a tutorial on how to do that.

Links

Website: <https://www.ribbon.finance/>

CoinGecko Listing:

<https://www.coingecko.com/en/coins/ribbon-finance>

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