maxBTC Primer (Jan ‘25)

1. **Executive Summary**
    a. **High-Level Overview**

    MaxBTC is a yield-bearing synthetic asset that represents an effective 1x long BTC position and captures yield from Liquidity provider pools on perps protocols (Jupiter for Version 1) as well as funding rate.

    - MaxBTC BTC nominated APY is estimated to vary between 10% (bear market low) to 20% (bull market)
    - MaxBTC can be minted on multiple chains (Neutron, Ethereum Mainnet, ...) using wBTC or native BTC deposits.
    - Users can withdraw maxBTC to receive the underlying BTC assets at any time (with a small withdrawal period or potentially a withdrawal queue).

    MaxBTC is created by contributors from Drop and BondHive, and managed by Drop DAO.

    b. **Market Opportunity**

    Perps markets found PMF in crypto and are here to stay. They fundamentally need liquidity and will reward liquidity providers with higher rates than available in the lower-risk avenues such as staking and lending.

    However, these liquidity pools lack clear directional exposure to the desired assets (e.g. Jupiter JLP pool represents a mix of BTC, ETH, SOL, and USDC/T) and need to be actively managed.

    maxBTC brings superior yields generated by perps markets liquidity pools to the users that prefer clear directional exposure to a given asset (most of the users).

    c. **Key Value Proposition**

- 2-3x higher APY compared to the other BTC nominated yield opportunities (5-7% as of January 2025)
- yield comes in BTC, not points
- maxBTC can be used as collateral to get additional yield / hedge
- low risk of negative APR

2. **Yield Generation Strategy**
    a. **Strategy overview**

    The BTC deployed by a user is managed in the following way:

    - 70% is deployed to Jupiter JLP pool (27% APR at the time of writing, mix of SOL, ETH, BTC, USDC, USDT)
    - the other 30% is deployed as collateral to Binance, where the following position is created:
        - short ETH, SOL to create delta neutral exposure to these assets
        - leveraged long on BTC to achieve effective 1x long BTC position
    - The Binance position must be adjusted regularly to accurately reflect the changed JLP pool composition and the net open position of all traders within that pool
    - In the future, the same strategy can be used to create a similar asset that uses stETH as the underlying asset (8-10% estimated APR)

    b. **Where is the yield coming from?**

    JLP pool yield consists of:

    - 75% of the generated fees from opening and closing fees, price impact, borrowing fees, trading fees, and liquidation fees of the pool

    c. **Risks**

    - **Market Dependence for JLP Sales**: Currently, we rely on the open market for selling JLP tokens. As we scale up, our aim is to become redemption partners with the protocol, which should mitigate this risk

- **Liquidation Risk from Extreme Price Movements**: Our strategy involves short positions in SOL and ETH to counterbalance BTC exposures. In a worst-case scenario, where SOL and ETH reach 100% utilization and BTC drops to 0%, our effective leverage could spike to 2.3x. This scenario implies a potential liquidation risk if BTC prices fall by approximately 45%. Although our rebalancing is automated and initiates well before reaching such thresholds, network congestion on SOL could delay transaction finality up to three hours, compared to the usual one minute, increasing the risk of liquidation during extreme market conditions. It's important to note that historically, BTC has never experienced a weekly drop exceeding 33.52% since its perpetual listing on Binance in 2019. Nonetheless, we cannot completely rule out the possibility of such extreme market movements. Deployment strategies impact this risk as follows:
    - **30-70 Deployment**: 45% price drop triggers liquidation
    - **40-60 Deployment**: Requires a 66.6% price drop, with a yield reduction of 14% compared to the 30-70 strategy
    - **50-50 Deployment**: No liquidation risk but yields are 28% lower compared to the 30-70 strategy
- **Large Withdrawals and slippage**: Monitoring of the liquidity pool indicates a capacity of $20 million with only 0.3% slippage. Withdrawals larger than this may incur significant slippage, which will be passed on to the user
- **Smart Contract Risk**: Inherent in blockchain-based financial instruments and can affect operations and security
- **Custody and Exchange Risk**: There's a risk associated with the potential insolvency of our hedging platform, Binance. While principal amounts are protected, the yields might be compromised in such an event

d. **Scalability**

The strategy’s scaling is limited by the following:

- size of the perps liquidity pool: $1.75B on Jupiter at the time of writing, can be further increased by introducing new perps markets
- ability to liquidate the JLP position in case of very quick BTC price change (~45% in 3 hours): with the proposed 70/30 split, the scale is limited at approximately $200M, can be increased by shifting the split closer to 50/50 at the cost of APY going down to around 10%
- Overall, we plan for growth by introducing additional perps markets and reducing the liquidation risk over time after bootstrapping the initial TVL

3. **Market Analysis**
    a. **Total Addressable Market**

    Current on-chain BTC yield market is $4B+ overall:

    - $3.5B wBTC market on Aave
    - $200M+ Pendle BTC pools
    - etc.

    We expect this to grow A LOT

    b. **Competitor Landscape**

    All the BTC yield options now are very limiting:

    - BTC LRTs only offer points yield, unless a user yield-splits on Pendle, in which case their asset can not be composed with the other DeFi protocols (i.e. one can’t use Pendle PT tokens as collateral)
    - BTC vaults can generate BTC nominated yield (up to 5-7% ATM) but also lack composability
    - Both of these options provide relatively low APR

	maxBTC	BTC LRTs	BTC vaults
BTC nominated yield	Yes	No	Yes
Tokenization / can be used as collateral	Yes	Yes	No
APY	15-20% (BTC)	4-7% (points)	1.5% BTC 4% points

c. **Target Customer Segments**

- BTC whales who are active in DeFi
- Liquid funds

4. **Technical Architecture**

```
graph TD;
    subgraph "Network Bridges"
        B1["BTC Network<br/>(accepts BTC)"]
        B2["ETH Network<br/>(accepts wBTC, ETH,<br/>USDC, USDT)"]
        B3["SOL Network<br/>(accepts SOL, wETH,<br/>USDC, USDT)"]
    end

    NW["Neutron Wallet"]
    SC["Smart Contract<br/>(Neutron Network)"]

    B1 & B2 & B3 -.->|"Token Info"| SC
    SC -->|"Issues Tokens"| NW
    B1 & B2 & B3 -->|"Direct Asset Transfer"| CEX

    CEX["CEXs (Binance/OKX/Bybit)<br/>Used for Hedging"]

    CEX --> |"70% Assets<br/>(USDC/USDT)"| MW["Multi-sig Wallet"]
    MW --> PS["Perpetual Strategy<br/>(JLP/GMX/Hyperliquid)"]

    %% Add styling
    style CEX fill:#f9f,stroke:#333,stroke-width:2px
    style MW fill:#bbf,stroke:#333,stroke-width:2px
    style PS fill:#bfb,stroke:#333,stroke-width:2px
```

```
style SC fill:#fcf,stroke:#333,stroke-width:2px
style NW fill:#ffc,stroke:#333,stroke-width:2px

%% Add notes
subgraph Custody
CEX
end
note["Note: CEX assets held by<br/>custodians (Ceffu/Fireblock/Copper)"
Custody --- note
```

1. [Need Kai's input here]

5. **Roadmap & Milestones**
    a. **Timeline**

        Q1 '25:

        - Prototyping
        - Design technical architecture
        - Preparing legal setup
        - Open limited deposits for close partners for continuous strategy tests
        - Get TVL and liquidity commitments
        - Potentially open BTC deposits

        Q2 '25:

        - Open deposits with step-by-step cap increases
        - Launch Droplets program for maxBTC
        - Start maxBTC minting and open DeFi integrations on Neutron, ETH main net, etc.
        - Potentially launch main net
        - TGE for DROP token

    b. **Growth Targets**
        i. Pre-deposits TVL commitments: $50M

ii. maxBTC TVL at TGE: $200M+