YIELD FARMING

By Paul Donaghy

Yield Farming

Part One

Part One - An Intro Guide to Staking, Lending, and Liquidity Providing

1st Edition, November 2022

Paul Donaghy

Yield Farming Part One Table of Contents

Yield Farming Part Two Table of Contents

Yield Farming Appendix Contents

Introduction

I got my introduction into cryptocurrency through mining on an old laptop and not long after bought my first set of coins, Bitcoin and Ethereum. I found the world of crypto intriguing but also confusing. As soon as I started down the crypto rabbit hole I was hooked and absorbed as much as I could on the subject in the following months and up to this day.

Owning some Bitcoin and Ethereum was nice, but what I really liked was to be able to stake my coins and earn more coins on top of my original purchase similar to the way in which bonds grow. I've been involved in stocks for decades and cryptocurrencies reminded me of technology growth stocks that also paid huge dividends giving investors the best of both worlds.

Unfortunately, like stocks, simply holding coins is very hands off. It is rather boring. Additionally, the longer I held my coins the more I realized that my stocks and crypto moved in the same direction. With little in the way of additional diversification, I began to wonder if this new world of crypto really offered much difference in my portfolio other than being very volatile.

I'd come across the term "yield farming" at some point early on and was immediately captivated by the subject. I didn't understand it as it was quite complex and the risk associated with yield farming seemed daunting. You know how you can sometimes be drawn to something scary? That is how my fascination felt towards this new area of crypto.

In the beginning, the more I tried to learn about yield farming, the more perplexing it seemed to be. The resources on yield farming were both fragmented and limited. It was frustrating early on and really before I fully understood it I jumped into my first yield farm. Despite early mistakes, this felt *different* from anything I had ever done in finance and I was obsessed with it.

Throughout my yield farming journey, I developed strategies that limited my risk while still generating massive returns. As my understanding of yield farming grew, I began to discover platform niches that while initially complicated, eventually began to make sense. I soon was able to take what I had learned and apply it to other similar platforms.

My goal with yield farming has been to build long-term passive income. I'm amazed by how much income I can generate by simply pushing a few buttons a day. Now I hope to bring others into the space by providing a resource that explains what yield farming is, build the right strategy for each situation and finally provide a step-by-step guide on how to get started.

Welcome to step one of your journey!

Chapter One - What is Yield Farming?

Yield (verb) produce or provide

Farming (noun) the activity or business of growing crops

Yield Farming is an investment strategy utilized in cryptocurrency to maximize returns on assets leveraging Decentralized Finance (DeFi). There are three main methods used in yield farming to generate returns.

1) Staking - is the simplest form of yield farming and often the safest method as well. Staking involves holding your coins or tokens on a blockchain that offers proof-of-stake (POS) and offers rewards in terms of interest. Some of the bigger cryptocurrencies currently offering POS include Cardona (CAR), Solana (SOL) and Polkadot (DOT). Ethereum (ETH) has also moved to a POS consensus and Ethereum 2.0 now offers staking rewards. Many crypto exchanges offer staking including Coinbase and Crypto.com.

2) Lending - is the process in which cryptocurrency holders lend out their coins or tokens to borrowers. A number of platforms exist that allow lenders to deposit cryptocurrency and then loan it out receiving interest as a reward. The loan is usually backed by collateral held in terms of a borrower's other cryptocurrencies totaling more than the amount borrowed, and the loan is managed by a smart contract. One can receive further gains through leveraged lending which gets more risky. Platform examples include Aave and Compound.

3) Liquidity Providing - is when users combine two coins or tokens into a single Liquidity Pool (LP) token which allows other investors to “swap” or trade back-and-forth between the two underlying tokens. For providing this liquidity, users are rewarded from the fees paid to perform a swap from one token to another based on what percentage of the overall pool one owns. The LP tokens held must remain in a 50/50 balance in terms of value, so the underlying coins in a LP token are constantly shifting. This method of yield farming is where we will spend much of our time exploring in this book. Platform examples include Uniswap and PancakeSwap.

What are the benefits of yield farming?

Holding a cryptocurrency is similar to owning a stock in the fact that your gain or loss is typically determined by the price movement of the underlying asset. As cryptocurrencies become more and more correlated to the movement of the stock market, they offer less and less diversification in a portfolio consisting of stocks or mutual funds.

Yield Farming offers a way for one to earn "yield" and build up holdings, or number of coins, in cryptocurrencies. In many ways, it is more similar to holding a bond or a dividend paying stock but with the upside (or downside risk) of a growth stock. In bull markets, yield farming provides a way of increasing your underlying asset and boosting returns as the underlying cryptocurrency price increases. In bear markets, yield farming provides "passive income" which can help offset losses caused by the price depreciation of cryptocurrencies.

The yield earned at a traditional bank is typically 1% or less a year while the yields earned in yield farming can be in double, triple or even quadruple-digit annual returns. Take that to the bank!

What are the risks of yield farming?

As with simply holding cryptocurrency, the risk of a decrease in the price of the asset is ever present. The risk of the platform holding the assets failing is also present and potentially heightened in the DeFi protocols that offer yield farming as no insurance typically exists. Scams and "rug pulls" can also result in lost assets due to the decentralized nature of the platforms and technology used. These risks are true of staking, lending and liquidity providing. Lending adds the risk of the smart contract failing and not being repaid.

Liquidity providing adds the risk of impermanent loss which will be detailed in chapter 8. In short, impermanent loss exists because of the 50/50 ratio required of the underlying two cryptocurrencies held in a LP token. The loss comes from the fact that you will end up holding more of the coin that has lost value relative to the other coin when you decide to sell or split up the LP token. Impermanent loss scares many off from getting involved in liquidity providing, however, the risk can be minimized through various strategies that will be discussed in later chapters as well.

Who should get involved in yield farming?

While some investors play a short-game chasing high initial yields in farms, those with a long-term strategy in cryptocurrency are best suited for yield farming as it is presented in this book. If you are holding coins for the long-term, why not grow the number of coins over time and boost your returns?

Yield Farming also offers a much deeper dive into cryptocurrency and will expand your knowledge of the space significantly. It will help you diversify your cryptocurrency holdings, allowing you to maximize gains during a bull market and minimize losses during a bear market. It is more complex than simply buying coins so make sure to do plenty of research and start small with risk capital you are comfortable losing as you learn and make mistakes.

Chapter Two - Decentralized Finance

Decentralized (adjective) controlled by several local offices or authorities rather than one single one

Finance (noun) the monetary resources and affairs of a person, country, or organization

Decentralized Finance (DeFi) is the emerging technologies that are based upon distributed ledgers such as the blockchains used by cryptocurrencies. It is important to understand the basics of decentralized finance which is the financial system that yield farming takes place on.

What is Decentralized Finance?

While cryptocurrencies like Bitcoin act as a store of value, Decentralized Finance or DeFi, are the platforms that allow you to trade, lend, borrow, stake and yield farm cryptocurrencies. In DeFi, unlike traditional finance, there are no banks giving users, rather than financial institutions, control over their own money. Transactions in DeFi are usually both quick and inexpensive with the accuracy of the transaction is based on user input.

In traditional centralized finance your money is held within a bank whose purpose is to make money for itself and its shareholders. These banks are part of a financial system that moves money from one institution to another, charging fees for performing transactions, while charging high rates for borrowing. These institutions are very bureaucratic and slow. Think of how long a credit application can take to get approved. Centralized financial institutions are highly regulated by the government, but in reality they hold your money and control it only giving you the illusion of control.

How do Decentralized Finance Transactions take place?

Transactions in DeFi take place through peer-to-peer networks, often called a decentralized exchange or DEX, that rely on security protocols, software, hardware and connectivity. Instead of holding money in a bank, you hold money in a digital wallet in terms of cryptocurrency that can be transferred in seconds (or minutes at most) by anyone with an internet connection and without needing third-party approval such as a bank.

Unlike bank transactions, DeFi doesn't need to associate your name with the movement of your money, instead relying on the ledger to use “addresses” that signal from and to where the money

gets transferred. Think of this address like your home address and a transaction like a piece of mail coming from another address. Get the address wrong in crypto, however, and you can lose the funds being transferred just like a piece of mail being sent with the wrong address. The address will be represented by a long string of numbers and letters such as this - 0x6Ddf2e66399B5DfE4753eE9fcB6D40B9E933d2f2.

What technology does Decentralized Finance use?

Cryptocurrencies are built upon underlying blockchain technology and the DeFi platforms use these blockchains to perform a user's activities. A blockchain is a distributed and secured ledger, which is another way of saying a database that stores financial transactions.

When a transaction takes place, the data is recorded on a “block” of data that is verified by other users. Once these users agree on a transaction data block, the block is closed, encrypted and linked (or chained) to the previous block hence the term "blockchain." They are set up in a way that makes them unchangeable and thus secure.

DeFi also uses smart contracts, based on software coding, to ensure transactions occur smoothly. For example, if you lend a borrower crypto, the "smart contract" ensures that the borrower is over collateralized and will trigger a liquidation of the collateralized holdings to pay you back if the borrower has any issues with the loan. Because of the overcollateralization, these loans don’t have nearly the default rates that banks and other traditional lending institutions do which often have equal or under collateralization.

Total Value Locked

Within any platform you can total up all the value of the cryptocurrency that lies within, this is called total value locked or TVL. It is simply the sum of all the cryptocurrency deposited, staked, loaned or being held within liquidity pools associated with the platform. A platform with a low TVL is typically less stable and riskier than one with a high TVL or a lot of capital behind it.

As you learn how to start evaluating different DeFi projects to invest in, TVL will be one of the first places to look to decide if it is a good project for you or not.

Chapter Three - Automated Market Maker

Automated (adjective) an automated factory, office, or process that uses machines to do the work instead of people

Market (noun) an area or arena in which commercial dealings are conducted

Maker (noun) a person or thing that makes or produces something

An Automated Market Maker (AMM) is the protocol that allows a decentralized exchange (DEX) to authorize cryptocurrencies or other assets to be traded using liquidity pools (LPs) for automated liquidity.

What is an Automated Market Maker?

In a traditional financial market transaction they use an order matching system of connecting buyers and sellers based on the prices each party set to come up with a match. This happens with stocks, commodities, real estate and virtually all other traditional kinds of assets. In cryptocurrency, centralized exchanges work in a similar fashion as traditional financial markets. In decentralized finance (DeFi), they have come up with a much more efficient system of ensuring continual liquidity is held in an automated money maker (AMM). Within the AMM, a liquidity pool holds a large amount of tokens in an equal value (50/50) so users can swap one of those tokens for the other both quickly and efficiently.

These digital asset transactions happen in a permissionless manner and happen automatically within the liquidity pool itself. The DEX allows for autonomy, giving users the authority to make trades or swaps straight from non-custodial wallets in which the user controls his or her own private keys similar to passwords. The AMM protocols use smart contracts, self-executing computer code, to determine the price of the digital assets in question and provide liquidity. These smart contracts manage the liquidity pools allowing for the swaps between tokens to take place. This allows you to exchange Bitcoin for Ethereum and vice versa as an example.

Automated Market Maker Mathematical Formula

The beauty of an AMM all began with a simple formula first proposed by Ethereum founder Vitalik Buterin in a blog post regarding “on-chain market makers.” The formula is as follows:

*tokenA_balance(p) * tokenB_balance(p) = k*

In this formula "k" represents a constant balance of assets that determines the price of LP tokens in a liquidity pool. Since "k" cannot change, the change in price of the underlying assets in a LP token requires a rebalancing of the underlying pair of coins to maintain this balance.

This formula has since been simplified to "X * Y" = k, in which X represents the balance of one token and Y represents the balance of the other token.

How do prices in an Automated Market Makers Work?

Cryptocurrencies in a liquidity pool locked in an automated market maker use the algorithm above to determine the price of each cryptocurrency based on the amount of liquidity each has in the pool. Like in all of economics, it is a simple supply and demand function that ultimately drives the price action of the underlying assets in a liquidity pool.

As an example, if you have Bitcoin (BTC) and Tether (USDT) in a liquidity pool, when large amounts of Bitcoin swaps are taking place the price of BTC goes up since less BTC exists in the liquidity pool and more USDT is now present. In the liquidity pool, the AMM will need to adjust by raising the price of BTC to compensate for holding more USDT (a stablecoin that theoretically retains a $1 price) in relation to BTC to retain the balance of the two underlying coins.

The larger the liquidity, or total value locked within a liquidity pool, the more stable the prices of the underlying two tokens will remain. In-other-words, transactions within the AMM will have a smaller impact on the total liquidity because the transaction has a smaller impact on the algorithm keeping the two tokens in balance. This is why liquidity in crypto is very important as it helps stabilize the price of coins and reduce volatility.

Chapter Four - Liquidity Pools

Liquidity (noun) the availability of liquid assets to a market

Pools (noun) the funds from many individual investors that are aggregated

A Liquidity Pool (LP) is a collection of cryptocurrency coins or tokens that are locked into a smart contract that allows for trades between the underlying assets (pair of coins) on a decentralized exchange (DEX).

What is a Liquidity Pool?

Liquidity pools (LP) serve a critical function in decentralized finance (DeFi) and are the key ingredient of an automated market maker (AMM). The LP is the liquidity, or capital, within the AMM that allows swaps (trades) to be made. This means the coins or tokens within the pool can be exchanged for one another. These LP tokens are the backbone of yield farming and holders of LP tokens are rewarded for providing the liquidity needed to perform swaps.

The liquidity pool is simply a bunch of coins or tokens kept together in large quantities. Think of a liquidity pool in terms of the US dollars and the British pound. In order to exchange from one to another you have to go to a bank that holds both currencies. In this scenario, the bank is functioning as the AMM, while the collection of dollars and pounds the bank holds is acting as the liquidity pool. The bank teller is like the "smart contract" that does the exchange from one currency into the other. Unlike a bank, you can create LP tokens anytime of day and on any day, no bankers hours here.

How do you create a Liquidity Pool (LP) token?

Most LP tokens consist of two coins or tokens, however, some may consist of three or more which is much rarer. In order to create a LP token, you must first own both of the underlying tokens. For example, if you wanted to own a LP token consisting of Bitcoin (BTC) and Ethereum (ETH), you would first need to own both BTC and ETH.

The BTC and ETH coins can be bought on an exchange and stored on a wallet like MetaMask. When you are ready to create your LP token, you can combine them into LP tokens on an AMM. If you only hold one of the coins, you can also go to the AMM and swap half of the one you hold for the other tokens before combining them into the LP tokens. Regardless, once you hold the LP tokens you can place them into a yield farm, thus providing liquidity and begin to earn rewards right away in terms of an annual yield or percentage return on the LP tokens.

If BTC cost $40,000 and ETH cost $4,000, you would have to hold ten times the amount of ETH coins to pair with BTC to create your LP tokens. Once you create your LP tokens they must always remain at a 50/50 value balance so the amount of underlying BTC and ETH coins will

shift over time away from the 10:1 ratio you started with based on the price movement of each coin.

How do you earn rewards for holding LP tokens in a yield farm?

Once LP tokens are placed into a yield farm you become a liquidity provider and your LP tokens earn yield based on the percentage of the overall pool you hold. The yield is primarily derived from transaction fees generated through the swaps of the underlying coins or tokens within the AMM. The annual returns fluctuate based on the number of swaps being performed.

Let's say your BTC-ETH LP tokens are in a yield farm and your tokens equal 0.005% of the pool's overall value. This means you will receive 0.005% of the income generated within that liquidity pool on the AMM. So if the pool generates $50,000 in fees in a day, you would receive $250 worth of coins ($50,000 * 0.005%). The $250 in rewards can be paid out in a number of ways but are often paid out in the AMM's native coin or possibly one of the underlying coins in your LP token. You can take out, or harvest, these rewards or compound them back into LP tokens to increase future rewards even more which is how significant growth over time really occurs.

Returns in yield farms can range from small percentages in the single digits annually to 1,000% or more for riskier investments often containing new and volatile tokens. Most yield farms have returns in the double digits annually, however, triple digits are not uncommon either. The greater the risk, the greater the return and later we will discuss strategies dealing with both risk and reward.

The smaller the overall liquidity pool in total value, the larger share you will hold and the more price movement in the underlying coins will be seen with token swaps within the pool. The larger the pool, the smaller percentage you will hold overall and the less price movement in underlying coins will occur due to swaps meaning less volatility in the coins.

Costs associated with Liquidity Pools and Yield Farming

Please note, transactions within an AMM include creating LP tokens, placing them into yield farms, along with collecting or compounding tokens. All these activities come with associated “gas fees" which are the transaction fees associated with each action. The amount of gas fees you pay are determined by which network the AMM sits on as well as the amount of activity currently happening on the network. The higher the activity, the higher the fees. Also, expect to pay a fee to the exchange when first buying your coins as well as transferring the coin(s) to your wallet. As mentioned, there are fees for creating the LP tokens in the form of gas fees and "slippage" which is a percentage you pay when creating the LP token which also varies based on what AMM you are using. These fees will be discussed in greater detail in chapter seven.

Because you will be paying fees each time you collect or harvest your rewards, it is a good idea to keep a decent amount of the token that’s used to pay the fees within your wallet. This token is generally the main native token of each network so for example Ethereum (ETH) on the

Ethereum network, which can have expensive transactions, or lower fee networks such as the BB Chain using it's BNB Coin or the Polygon network which uses its own MATIC token. For those starting out with smaller amounts of capital, it is best to minimize these costs and this will be discussed further in the second part of the book as we dive into building specific strategies for yield farming.

Don’t be scared off by “gas fees” as once you get going you can occasionally convert yield farming rewards into the token used for the transactions on the network so you don’t have to constantly add new capital to your wallet. Once you really become familiar with various projects, you can enter some that constantly pay rewards in a network's native coin so you will always have enough for gas and other fees on the network.

Chapter Five - Smart Contracts

Smart (adjective) = programmed so as to be capable of some independent action

Contracts (noun) = a written or spoken agreement

Smart Contracts are self-executing computer programs stored on a blockchain that run when predetermined conditions are achieved. These programs automate an agreement to take place on the blockchain so that each party understands the certainty of the outcome without the need for an intermediary to get involved.

What is a Smart Contract?

Smart Contracts are computer codes that manage financial agreements between two parties, one being a buyer or borrower and the other being a seller or lender. The smart contract code contains the executable agreement that is triggered when the conditions of the sale or loan are met. Once the code is executed on the blockchain, the transactions that take place due to the smart contract can be traced and are irreversible.

Smart Contracts were first invented a full ten years before Bitcoin came into existence when Nick Szabo, an American computer scientist, invented a virtual currency called "Bit Gold." Although this launched in 1998, Szabo actually first proposed the idea of a smart contract four years earlier and this served as a basis for his newly invented currency.

In reality, smart contracts are basically "if/then" codes that state "if" something happens "then" execute something to happen in response.

Smart Contract Analogy

You can think of a smart contract transaction like a vending machine transaction. As the buyer, you agree to pay for an item for a predetermined amount of money. The seller is the owner of the vending machine who determines the amount the item costs and provides the item within the vending machine. The vending machine's computer code acts as a smart contract, verifying the amount paid is equal to or greater than the amount required and then executes the transaction by expelling the item into the receiving area and refunding any overpayment.

Just like with a smart contract, once the transaction takes place in a vending machine it cannot be reversed. Well, you can always bang on the vending machine if the item gets stuck I guess.

Smart Contracts in Yield Farming

Back in chapter one we discussed three types of yield farming; staking, lending and liquidity providing. Smart contracts can execute transactions in each of these types of yield farming activities.

Staking - when staking your cryptocurrency, the simple smart contract will automatically provide you with the amount of interest as dictated by your agreed upon rate and at the agreed upon time intervals.

Lending - the smart contract will take the borrower's collateral and deposit that amount, which is equal to or greater than the value of the loan itself, into the lending platform. The borrower will then have to repay the amount of the loan plus the agreed upon interest or have the collateral "liquidated" and transferred to the lender. There are a number of conditions that can be placed onto any given loan within the contract including "early liquidation" if it appears the borrower is getting into trouble with their loan.

Liquidity Providing - smart contracts control a number of functions when providing liquidity including allowing users to exchange one token for another. Once your LP tokens are made, the smart contract ensures the underlying tokens maintain a 50/50 ratio in terms of value. It also ensures you are rewarded in yield for holding LP tokens by appropriating you with a percentage of the transaction fees based on the overall percentage of the total liquidity pool you own.

Key Benefits of Smart Contracts

In many ways, smart contracts in yield farming are actually safer than those used in loans in the real world. Part of this is due to the fact that the loans in cryptocurrency are often over collateralized and are locked into the smart contract. Also, loans in the real world take place in very bureaucratic organizations that take a lot of time to process, however, smart contracts can implement loans very quickly. Since the rules are already established, there is far greater consistency in smart contracts than in traditional lending and borrowing.

Furthermore, smart contracts offer some very important additional benefits including:

Immutability - the blockchain smart contracts run on are decentralized and offer tamper-proof transactions that are secure and can be audited.

Permissionless - smart contracts manage tractions in decentralized financial applications allowing anyone with a crypto wallet and internet connection access to the application.

Transparency - the blockchain smart contracts record every transaction that takes place on the network and are verified by users on that network.

Interoperability - the ability of computer systems and the software code to exchange and make use of information allows the applications to work together in an integrated fashion.

Self-custodial - one of the great benefits of owning cryptocurrency is that the holder can control his or her cryptocurrency fully. This is true of most yield farming actions as the transactions are performed on Web3 wallets controlled by the users.

Chapter Six - APR vs APY

APR = Annual Percentage Rate

APY = Annual Percentage Yield

APR and APY both represent measurements of interest, however, they are calculated quite differently. The major difference in the two is when they are used and how compounding is calculated. It is important to understand how each calculation works to be able to compare different returns in one expression versus the other.

Compounding

Compound interest is the addition of interest on top of the principal sum, or interest on principal plus interest. The result of reinvesting interest by adding it to the existing principle, is that the interest amount derived the next period is greater than the time before.

If you want to make money in financial markets it is critically important to understand what compounding is and how it works. Don't take it from me however, let's turn to who was perhaps the smartest man to ever live and see what he had to say on the subject.

"Compound interest is the eighth wonder of the world. He who understands it, earns it; he who doesn't, pays it." - Albert Einstein

What Einstein is stating is that compound interest can work for you or against you. With stocks, many financial planners will work with an assumed annual interest rate of 8-10%. But what if you could earn as much in a month or less? Yield farming offers the opportunity to earn very high yields that compound monthly, weekly or even daily. If you take nothing else from reading this book, please understand how important compounding is to growing your money and find ways to maximize the power of compounding over time. This is the secret sauce of investing!

What is APR?

Annual Percentage Rate (APR) typically represents the amount charged for borrowing. It is a simple calculation and better for situations that don't call for compounding. All things being equal, APR calculations will look smaller than APY calculations and that is why they are used more often when you are borrowing money and looking for the smallest possible rate.

APR = Periodic Rate x Number of Periods in a Year

What is APY?

Annual Percentage Yield (APY) typically represents the amount charged for loaning out capital. The more complex calculation is better for situations that involve compounding. Since APY calculations take into account compounding, they are often used in yield farming which allows

you to compound your gains and grow the underlying principle or gain interest on your interest. It also doesn't hurt that the returns look larger in APY terms and are more attractive to those staking or adding liquidity and getting the APY returns.

$$APY = (1 + r/n)^n - 1$$

r = annual interest rate

n = number of compounding periods each year

APR vs APY Example

Imagine you are investing $1,000 in a yield farm that earns 10% interest per month but you aren't sure if that is in APR vs APY terms. How might those returns look different?

APR

APR = 10% x 12 months = 120%, so in this case you will multiply your principal times your annual interest rate ($1,000 x 120%) to determine your interest and end up with $1,200 in interest and a total of $2,200 after a year.

APY

APY = (1 + 0.1/12)^12 – 1 = 213.8428%, so in this case you will multiply your principal times the compounding annual interest rate ($1,000 x 213.8428%) to determine your interest and end up with $2,138.43 in interest and a total of $3,138.43 after a year.

Which return would you prefer?

In this example you are only compounding once a month, however, in yield farms you compound much more frequently and likely once every day or two. Because you are compounding more frequently, the interest you earn on top of interest is much more significant given all other things being equal.

There are many compounding calculators that can be found on the internet like the APY calculator provided by Calculate Stuff.

I was drawn to yield farming due to the compounding effect given how often you reinvest your rewards. Just imagine what Einstein would have thought if he had yield farming as a tool back when he first discovered the power of compounding.

Chapter Seven - Gas Fees, Slippage and Other Fees

Gas (noun) = a substance or matter in a state in which it will expand freely to fill the whole of a container

Fees (noun) = a payment made to a person or public body in exchange for advice or services

Slippage (verb) = the action or process of something slipping or subsiding

There are a number of costs associated with yield farming including both gas fees and slippage. It is important to know what each of these fees are as they will impact your overall returns. These fees can apply to various transactions within cryptocurrency and not just yield farming.

Gas Fees

A gas fee is the amount you need to pay to perform a transaction on a network. These fees are typically priced in small amounts of the main coin or token used on the network. For example, on the Ethereum network it will cost a fraction of Ethereum (ETH) to perform a transaction or execute a contract. These fractions of Ethereum are denoted in terms of a unit called a "gwei" when estimated and eventually paid for completing a transaction.

Gas fees are used to pay miners or stakers for their work in verifying transactions and securing a network. It is the miners who set the gas fees on a network like Bitcoin that is Proof of Work. If the gas fee is too low, miners can choose to ignore the transaction.

It is important to note that different networks charge different gas fees. Ethereum is currently one of the most expensive networks to conduct transactions on which is one of the main reasons so many competing networks have emerged. These so-called "Ethereum Killers" perform the same transactions for significantly lower gas fees and usually at much faster speeds.

If you plan to yield farm with smaller amounts of capital, it may be wise to choose a farm on a non-Ethereum network so your transactions will not eat into your profits.

Slippage

Slippage is the difference in price of an asset you expect to pay and what you actually pay. Slippage is determined by two factors, liquidity and volatility. While the term slippage generally is seen as negative, it is noteworthy that slippage can also be positive and work in your favor as well as you can receive a better price than originally expected for example if the price of the coin you are buying is going down during the purchasing process.

When purchasing any cryptocurrency you can use a market order which simply buys the token as quickly as possible at the current price or place a limit order. You are more vulnerable to

slippage with a market order because when you place a limit order you reduce the slippage on the high end by putting a limit on the price you are willing to pay for the token.

Factors in Slippage

Liquidity is critical because the more liquidity an asset has, the easier it is to convert to cash or another asset. The less liquid an asset is, the less backing it has to trade and the bigger the impact of a high volume trade. Imagine a token that has $100,000 in liquidity and someone wants to sell $80,000 worth of that token - what do you think will happen to the price? It will drop significantly. Now imagine the same token sale transaction where there is $100M in liquidity, the same sale will have almost no impact on price.

Volatility is the other important factor when it comes to slippage. The more volatile the token, the more the price swings wildly. As you are trying to perform a transaction on that volatile coin, the more the price is changing as you are completing the transaction requiring a higher slippage to account for those price fluctuations.

Slippage Calculation

Slippage in cryptocurrency is generally expressed in percentage terms but it can also be expressed in monetary terms as well such as dollar amounts.

$ of slippage / (LOP - EP) x 100 = % slippage

LOP = limit order price / worst expected price

EP = expected price

Many platforms will place charges on both buy and sell transactions within their platform. These are almost always expressed in percentage terms and are often different between buy and sell transactions. These can be rather large fees and it is important to understand the fees on both the buy and sell side to calculate your returns.

These fees are used to pay the developers, go towards marketing the platform to new users, build liquidity within a platform's treasury, burn (or get rid of) tokens to cause upward price action, or they can be used as rewards to existing holders of the tokens.

Make sure you have enough crypto in your wallet to perform transactions or you will not be able to compound or collect your hard earned rewards. When first starting out, let's say you want to invest $1,000 into a yield farm. It is a good idea to purchase an additional $30-$50 worth of the coin used to pay the transaction fee so you won’t have to worry about it for a while. Once you are claiming rewards, you can always convert it into the crypto used to pay the gas fee to have enough in your wallet to pay future transaction costs.

Chapter Eight - Impermanent Loss

Impermanent (adjective) not permanent

Loss (noun) the fact or process of losing something or someone

Impermanent loss (IL) is a scary sounding phrase that keeps many from exploring yield farming, specifically providing liquidity. But what is it and is it really that bad?

What is Impermanent Loss?

Impermanent loss can occur when you provide liquidity to a liquidity pool by combining two coins or tokens into one liquidity pool (LP) token. These tokens must, in most cases, remain in a 50/50 split in terms of value so when the price of one of the assets changes in comparison to the other after the point in which you created them, the underlying coins must adjust to retain the 50/50 value split. The larger the price changes, regardless of the price change going up or down, the larger the impermanent loss.

The loss is calculated against what you would have in terms of total value if you just continued to hold the two coins at the time of deposit instead of combining the two into a LP.

When is Impermanent Loss incurred?

While the value of the LP tokens you hold changes all the time as the value of each of the two coins change, no realized impermanent loss occurs until the moment you sell your LP tokens or split them back into the two underlying coins once again. This is similar to holding any individual cryptocurrency in the fact that the price and value of your coins changes all the time, but you do not "lock in" a profit or loss until the point in which you sell. If you are following a HODL (hold on for dear life) strategy, the short-term price movements of a coin shouldn't be paid much attention to.

In many cases, impermanent loss is offset by the rewards one receives while holding their LP tokens.

Impermanent Loss example

Many people like to create LP tokens which include one stable coin. For example, let's say you want to yield farm using a LP token that combines Ethereum (ETH) valued at $2,000 at the time of deposit and Tether (USDT) valued at $1.00 and remains at that value throughout. You decide to invest $2,000 of which half will go ETH (.5 ETH for $1,000) and 1,000 USDC to be bought.

If ETH increases 25% to $2,500 by the point in which you sell, the total value if you simply held both tokens would be $2,250 as you would gain $250 on the ETH portion (if $2,000 became $2,500 in ETH but you had half an ETH, you would only get half the gain). The $1,000 invested into USDC would remain the same.

Because the ETH-USDC LP token must remain at a 50/50 split in terms of value, your new amount of ETH coins would decrease to 0.44721 while your USDT coins would increase to 1,118.0 resulting in a total value of $2,236.07 or a total loss of $13.93. The greater the price movement, the greater the loss of what you would have had if you simply just held the coins. The loss of $13.93 is the impermanent loss incurred.

It is important to note that despite the fact that you “suffered” impermanent loss, in reality you actually had a gain overall. This is one of the reasons the term is misleading and often misunderstood. In this example, you gained $236.07 instead of the $250.00 you would have made holding the coins separately and not making a combined LP token.

Once again, these “losses” can be offset by the rewards earned by holding the LP tokens. There are a number of IL calculators that can be used including a simple one on Upoint.

Strategies to limit Impermanent Loss

There are a number of strategies that can be employed to limit the potential impermanent loss. The above strategy isn't necessarily a strong one since you can almost be sure that the non-stablecoin portion of the LP token will certainly change while the stablecoin remains constant virtually guaranteeing some impermanent loss. That said, it is a very popular strategy among some yield farmers but one I typically avoid.

There are other strategies that may work better depending on your situation.

Two Stablecoins - theoretically stablecoins should maintain their price over the long-term so by entering a liquidity pool with two stablecoins, such as USDT and BUSD, you should incur no impermanent loss over time.

Coins that move together - many cryptocurrencies tend to move in conjunction with one another. Generally, Ethereum will follow the price of Bitcoin. There will of course be some variation, however, impermanent loss should be minimized when pairing coins or tokens that have similar price movement.

Using a pegged coin - there are a growing number of liquidity pools that use LP tokens that are a combination of a coin and a token pegged to the price of that token. While pegged tokens can move "off peg" in theory should stay pretty close to their target and therefore the two coins tend to have price movements that mirror each other.

New coins or tokens are often paired with some of the top coins to provide liquidity within their ecosystem and offer very high rewards. Newer coins, however, often have a lot of price volatility and the attractive rewards are unlikely to offset the impermanent loss and should be avoided, especially for those new to yield farming.

Impermanent loss is a term you will often hear when first researching yield farming, especially when it comes to creating LP tokens. It can be difficult to grasp at first, but should not be a reason for you to avoid yield farming all together. We will discuss yield farming strategies further in part two of this book and these strategies will help minimize impermanent loss.

Chapter Nine - Rug Pulls

Rug (noun) a floor covering of thick woven material or animal skin

Pull (verb) exert force on (someone or something) so as to cause movement toward oneself

A rug pull occurs in the cryptocurrency industry when developers abandon a project and take the investors funds with them.

What is a Rug Pull?

A rug pull is a scam done by a projects development team in which they stop working on a given project and take all the money with them leaving investors with nothing. In most cases, the developer(s) pump up the price of a project and drive the price down to zero after taking out all the funds.

Since rug pulls involve the developers of a project, it is important to have a good feel for the team behind any project you are looking to invest in.

Types of Rug Pulls

There are three main types of rug pulls in crypto - pump and dumps, limiting sell order and liquidity stealing. It is important to understand the basics of each type of rug pull in order to avoid them when yield farming or dealing with any kind of crypto platform.

Pump and Dump is a term used to describe a scheme when a developer gets the price of a token to a certain level (pump) and then sells off a large number of their own tokens (dump) which drives the price down to a virtually worthless amount. The developer cashes in with the profit while investors are left holding the bag.

Limiting Sell Orders occurs when the developer adds code to a project which only allows the developer to sell the underlying tokens. In liquidity pools, there are two paired tokens for trading between the two tokens. Once the price action gets to a certain point, the developer sells their LP tokens, much like in a pump and dump scheme, leaving the remaining LP pairs worth next to nothing and holders unable to sell.

Liquidity Stealing is similar to limiting sell orders and occurs when the developer removes all the tokens completely from a liquidity pool. This is the most common form of rug pull within yield farming in decentralized finance and results in a token price of zero.

Rug pulls are considered either "soft" or "hard" in the crypto world. Soft rug pulls are when a developer dumps the tokens and deflates the crypto price as in a pump and dump scheme as described above. Hard rug pulls occur when a developer inserts malicious code into a project, often from the outset, allowing them to simply take all the investors funds as in a liquidity stealing exploit as in limiting sell orders and liquidity stealing.

How to Avoid a Rug Pull

Even the most knowledgeable crypto investors can be the victim of a rug pull. This is one of the reasons you should always diversify your holdings and stay away from the "all your eggs in one basket" situation. There are, however, several things you can look for as part of your research to help reduce the risk of getting involved in a rug pull.

Know the Developer(s) - the best way to avoid a rug pull is to understand who is behind the project. Has the team been "doxed," meaning has their identity been made public. Fake social media accounts and profiles are easy to make, so it should be deeper than that. Anonymous developers should always be seen as a red flag but not necessarily a deal killer. What projects has the developer(s) worked on before? Is the website and the whitepaper professional and free of grammatical errors.

Locked Liquidity - if the liquidity within a project is not locked on the token supply, the developer can easily take the money and run. You want to find a project that has liquidity in smart contracts that are time-locked. The higher the percentage locked, generally the safer the project. Almost all projects list a TVL (Total Value Locked) figure that is ideally at 80% or more of all the value in the project.

Crazy High Yields - we are involved with yield farms to make money so the higher the yield the better. Not exactly! Many farms do start out with very attractive yields that tend to fall as more and more liquidity is added to the pool. But if something looks too good to be true, then it probably is. The more you look at different yield farms, the more familiar you will become of the rates of return and the exceptions will jump out to you.

Wild Price Swings - huge price swings in a tokens price is a red flag. This is especially true of a project with limited token holders. The smaller the number of holders, the more cautious you should be of the project. You can check out the number of wallet holders in a project on the network on sites like Etherscan on the Ethereum network and BscScan on the BNB Chain. The developer isn't the only one who can swing prices, a "whale" or wallet holding a large number of tokens can manipulate token prices through the AMM algorithm.

External Audit - while an external audit does not guarantee a project won't rug pull, it is a step in the right direction. If a project has been audited by a third party, it should be apparent on the website and verifiable. A good audit should confirm no malicious code was found in the review. Projects with multiple external audits should be seen as more desirable than a project with no audits.

Chapter Ten - Yield Farming Platforms

Platform (noun) an application or website through which users are able to perform actions

Not all yield farms are created equal. Selecting the type of yield farm to get involved with depends on your strategy, risk tolerance and personal preference. Different yield farming platforms serve different purposes and it is important to understand the purpose of each in order to reach your own personal goals.

In the process of writing this, I have yet to find a source that describes all the types of yield farming platforms that exist so please consider this information as an incomplete guide to all the types of platforms out there.

Protocol vs Platform and Layer 1 vs Layer 2

You will hear the terms protocol and platform used interchangeably, however, they are two different things. A protocol is the base-layer code of a blockchain. The protocol, which sits on top of the internet, helps developers build projects on top of the blockchain itself. A platform is the product that sits on top of the protocol, it is what you are interacting with when performing yield farming actions. For simplicity, I will use the term platform predominately in this book.

As an example, the internet is accessed via a HyperText Transfer Protocol (HTTP) while Amazon is a platform or site built upon it that you can make purchases from.

You may also hear the terms layer 1 and layer 2. Layer 1 is the underlying main blockchain architecture, for example the Bitcoin blockchain. Layer 2 is an overlaying network that lies on top of layer 1, for example the Lightning Network which is a decentralized network that uses smart contracts functionality in the Bitcoin blockchain to enable instant payments across the network's user base.

Lending and Borrowing Yield Farm

Yield farming is still new having first been introduced in 2020 when a decentralized Ethereum lending platform called Compound introduced their governance token COMP and distributed it to its users through an automated system. This was unique in the fact that both lenders and borrowers would earn a portion of the weekly distributed COMP tokens. Ever since its release, users have turned to yield farming to look for ways to increase their returns.

In Compound yield farming, users of the platform are allowed to borrow different tokens against their deposited tokens, then swap those for their original tokens and re-deposit them. Users can maximize returns by borrowing multiple times based on a single original deposit.

Liquidity Providing

The success of Compound led to similar platforms and "forks," offshoots of the same code, which lead to further innovations. Curve and Uniswap helped popularize liquidity mining programs that distribute their governance tokens, CRV and UNI respectively, to depositors in their liquidity pools.

Essentially, once a user creates a LP token by combining two tokens they are rewarded by getting a percentage of the transaction fees associated by swapping one token for another within the platform. In-other-words, you "mine" the platform's governance token by simply providing equal amounts of the two tokens and are rewarded when someone decides to exchange for one another.

Yield Aggregators and Auto Vaults

The process involved in a liquidity providing yield farm generally takes place like this:

Swap Token --> Create LP Token --> Deposit in Liquidity Pool --> Claim or Harvest Rewards --> Sell Rewards --> Repeat Process

The issue here is that you pay gas fees in each step which can get expensive considering the number of transactions, especially on a higher cost network like Ethereum where many yield farms exist.

Yield aggregators, like Yearn Finance, solve this problem by pooling users' deposits together and simplifying the entire process by automating much of the work within the platform. While users still need to make deposits and withdrawals, all the other steps are done by the platform itself making them much more user friendly and much less expensive.

A close relative and variation of yield aggregators include "auto vaults" that auto-compound rewards given by third-party yield farms.

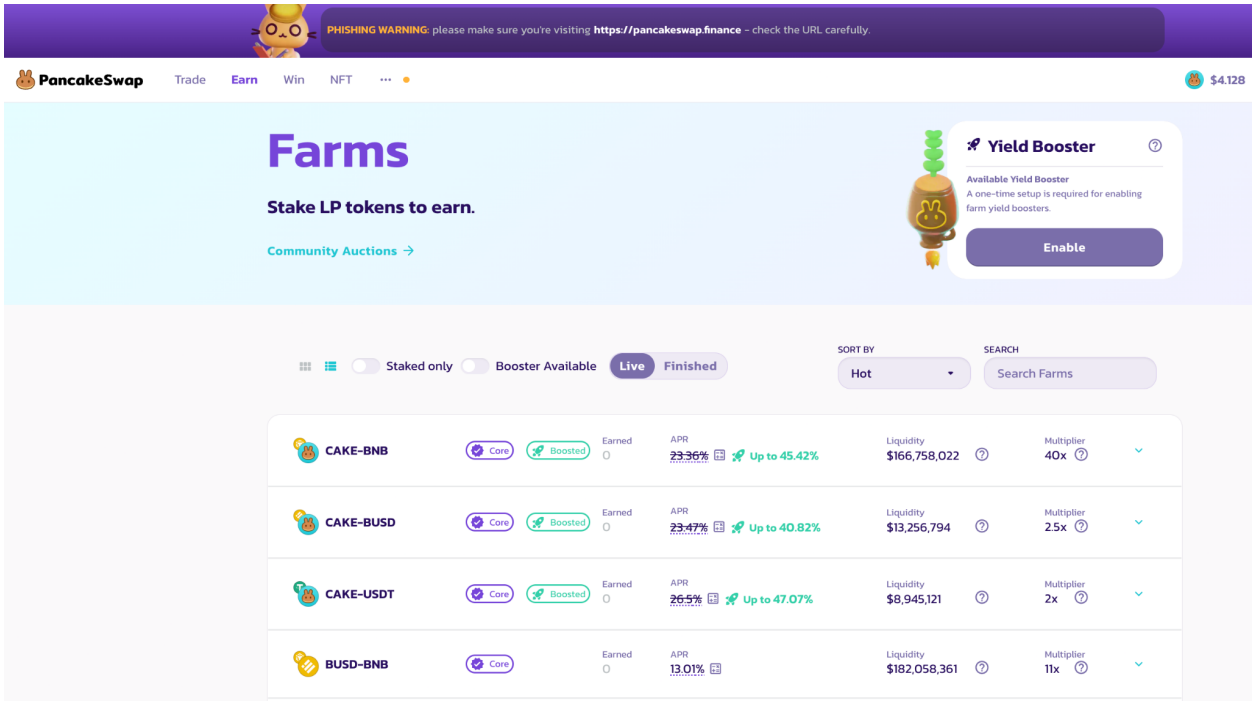
Yield Farming Ecosystems

While most of the above platforms allow you to exchange a wide variety of different coins, there are platforms now that offer a limited number of "farms" but also offer a number of different features within the platform to generate yields.

These platforms often have a couple of yield farms that create LP tokens using their own native token combined with a popular token such as Ethereum or a stablecoin pegged to the US dollar. These yield farms are the engines of the platform, but rewards from them are put into different areas in the platform to generate rewards in even more tokens. The different areas in the platform function differently, creating an entire ecosystem to invest in. As such, different strategies within the platform will create different results for users and it is important to understand how the different areas each work and how they can best benefit users.

Chapter Eleven - Simple Yield Farms

Now that you have been exposed to the basic terminology and concepts, let's take a look at an actual set of yield farms from the popular decentralized exchange site PancakeSwap.



Here we see the first four listed yield farms:

- CAKE-BNB
- CAKE-BUSD
- CAKE-USDT
- BUSD-BNB

The PancakeSwap (CAKE) token is the native coin on the platform which also serves as the reward coin for most farms. The rewards you see listed here will be paid out in CAKE. Unfortunately you cannot have your CAKE and eat it too, however, you can buy some cake with the rewards you earn.

Each farm offers a different pairing of cryptocurrencies. The first farm is where you can stake your CAKE-BNB LP tokens which combines the platform's reward token CAKE with the main coin on the BNB Chain, Binance Coin (BNB). This farm currently is offering an APR of up to 45.42%

The next two farms consist of LP Tokens combining CAKE with a stablecoin (pegged to the US dollar). This means that the stablecoin is built to be valued at $1.00 with minimal variance.

The CAKE-BUSD farm combines CAKE with Binance USD (BUSD) which is the stablecoin built by the BNB Chain network. This is the third largest stablecoin in cryptocurrency and a top ten coin overall as ranked by market capitalization. This farm is offering a return up to 40.82% APR.

The CAKE-USDT farm combines CAKE with Tether (USDT) which is the largest stablecoin in cryptocurrency and third largest coin overall trailing only Bitcoin (BTC) and Ethereum (ETH). This farm is currently offering returns up to 47.07% APR.

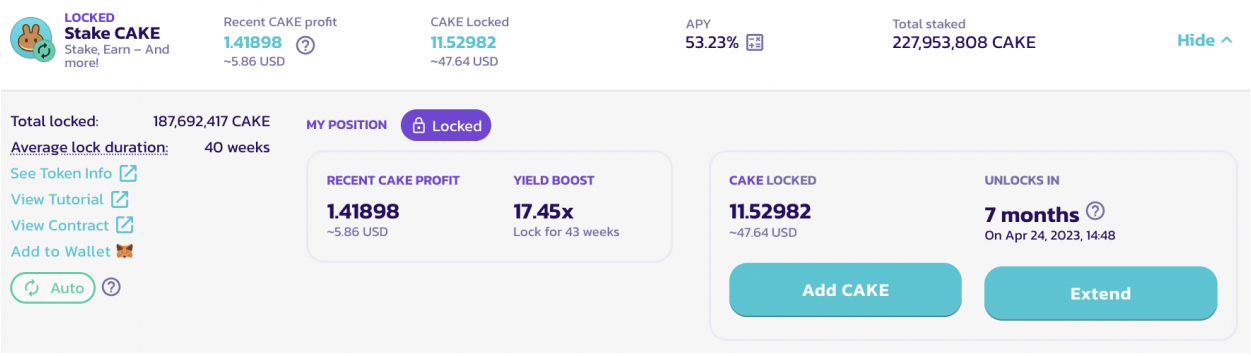
The final farm listed, BUSD-BNB, combines the Binance USD (BUSD) stablecoin with the Binance Coin (BNB) to form an LP token offering just over 13% APR. The BNB coin is the main coin on the BNB Chain and is used to pay transaction (gas) fees on the network.

There are many yield farms to choose from on PancakeSwap which operates on the BNB Chain and you will become more familiar with this in Part Two of the book. The yield farms listed above are some of the biggest on PancakeSwap as ranked by liquidity. The BUSD-BNB farm has over $182 million dollars of liquidity in it.

You can find yield farms with less liquidity in them offering over 500% APR to hold their LP tokens within the farm. With less liquidity, these farms are more volatile and considered more risky as a result. The potential for impermanent loss is much greater here, however, we will discuss different yield farming strategies in Part Two to build the right strategy for you and reduce risk.

Simple Staking

While yield farming consists of combining two tokens to form an LP token to place into a yield farm, you can also just stake a single token and earn attractive APY returns. In PancakeSwap, they call this feature a “Pool” and you can see an example below of their CAKE Pool which offers over 50% returns for long-term staking of their platform’s token.



Staking is a simple yield farming strategy to use when you are planning on holding a particular coin or token for some time to build your portfolio.

Conclusion

The purpose of Part One of this book was to introduce you to the terms and concepts of yield farming. It was not meant to make you an expert or even begin to start yield farming. As pointed out in the introduction, this was step one on your journey.

You do not need to fully understand everything that was written in part one to get started and you can keep this as a reference for later when you want to really understand any of the topics in greater detail. Appendix A contains videos on each chapter topic to help enhance your knowledge on the subject.

Now that you have some understanding of yield farming terminology, it is time for step two of your journey. In the second part you will begin to develop your own strategy based on your risk tolerance and personal situation. You will learn how I view the crypto space and how this greatly impacts the common sense approach I apply to yield farming. You will also learn how to limit risk through a variety of strategies you can employ.

Once you have a good idea of the strategy you want to execute, it is time to take step three of your journey which is the step-by-step walkthrough of how to actually yield farm. Like a toddler learning to walk for the first time, expect to struggle and also expect to need a little hand holding. Don't worry, I will be there to help guide you through the first few steps of this process, but more on that later.

Yield farming is complex, but that is to your advantage. If everyone was doing it, the returns would be significantly smaller. Only a small percentage of people own any cryptocurrency, let's say around ten percent. Of those people, how many do you think are involved in yield farming?

The amount of the overall population who understand and are involved in yield farming is infinitesimal. You are about to embark on a journey that few people know of, let alone get involved with. Opportunities like this are rare and come around only a few times in one's lifetime.

Please note, all of this is for educational purposes and does not constitute financial advice. You are encouraged to use what you learn as simply research on the subject to help you further your own research and help you implement the best strategy for your situation. In addition, the crypto world moves very fast so some of the platforms may have changed drastically or no longer exist. Use what you learn and the strategy you develop to embark in yield farming on your own.

Thank you for allowing me to be a part of your journey, now let us begin!

Yield Farming

Part Two

Part Two - Yield Farming Strategy and Step-by-Step Guide

1st Edition, November 2022

Paul Donaghy

Introduction

“Everyone has a plan until they get punched in the mouth” - Mike Tyson

In the first book you received the basic terminology and concepts associated with yield farming. What you are still missing is a strategy to employ along with a step-by-step guide to get started. This second book aims to help you build your strategy and walk you through exactly what you need to do in order to start yield farming.

If you are fairly new to crypto, this is a great starting point even if you didn’t fully absorb everything in the first book. If you have already given yield farming a shot, this book will help you think about how to go about it from a different perspective and attack things more strategically.

Those new into crypto will discover a vast world with over 20,000 tokens and that is just the beginning. You probably have heard of Bitcoin, Dogecoin, and maybe Ethereum, but not much else. The world of crypto has its own vocabulary that includes words and acronyms like exchanges, wallets, HODL and KYC. Stick around long enough and those will become part of your regular vernacular.

Part of everyone’s crypto journey includes making mistakes and trying to limit future ones. I started by investing in Bitcoin and Ethereum, then I moved onto other “alt coins” which is where I made my first few mistakes. I quickly came to realize the difference between the “blue chip” cryptocurrencies and the rest, often called “shitcoins” and for good reason..

I took what I learned by investing in cryptocurrencies and have applied that to how I approach yield farming. What it comes down to is pretty much common sense, the problem is there isn’t much of that in crypto. You can take the strategy presented in this book and tweak it to your own needs in order to come up with your own personal strategy that suits your situation best.

Then comes the hard part - execution. There are many potential pitfalls along the way but I am here to walk you through each step, one baby step at a time. After a while things will seem pretty easy, but not at first, so go easy on yourself and give yourself plenty of time as this is a marathon, not a sprint.

Welcome to step two of your journey!

Chapter One - My Crypto Strategy

It wasn't too long after first getting into crypto that I held over twenty tokens on multiple exchanges. To be honest, most of these tokens I had "earned" for free doing one thing or another online. I tracked it all on a spreadsheet where I manually entered the price of my tokens each morning which soon became pretty cumbersome. It wasn't long before I began asking myself, are holding all these different tokens worth it?

The real important question here revolves around just how many of these coins will exist in 5-10 years. The answer to this question is the key factor in my overall crypto strategy. After some deliberation I came up with the answer and now I primarily only care about three coins - Bitcoin, Ethereum and USDC (which is in my opinion the safest "stablecoin" pegged to one US dollar). With this in mind, and adding a "catch all" category, I look at four coin categories in total when it comes to building a crypto portfolio.

- Bitcoin *(largest cryptocurrency as ranked by market capitalization)*
- Ethereum *(second largest cryptocurrency as ranked by market capitalization)*
- USDC *(fourth largest cryptocurrency as ranked by market capitalization)*
- Other Coins *(everything else)*

With these categories in mind, it is time to come up with a strategy which determines how much exposure you want to each type of coin.

Risk Tolerance

What is your risk tolerance? Overall, are you a risk taker or risk adverse by nature? Perhaps more importantly, what percentage of your overall portfolio does crypto take up?

For me personally, crypto takes up a small percentage of my overall portfolio which is primarily made up of stocks and mutual funds in addition to my home equity. Crypto is a fast growing portion of my portfolio, but still makes up less than 5% of my overall net worth. As such, I view my crypto holdings as "risk capital", meaning I'm willing to lose everything I have invested in it. In-other-words, I take a fairly risky approach to the crypto portion of my portfolio. Obviously, my goal is not to lose what I have built, but to grow my crypto portfolio holdings by taking on risk.

Once you have examined your own situation, you can take another look at these categories. Because they are all crypto, they are all fairly high risk. That stated, not all high risk assets are created equal.

In general, I see USDC as the least risky since theoretically it does not fluctuate much in value and is backed by US dollars and securities. On the other end of the spectrum, we have the "other coins" which have wild swings in value and may not be around long term. In the middle we have the blue chips, Bitcoin and Ethereum, both have similar volatility and risk profiles. I'm not a huge fan of allocating anything but a small percentage of your crypto portfolio to coins outside of Bitcoin, Ethereum and USDC (or your preferred stablecoin), unless you are using a unique platform's coins to drive up your holdings in those three main coins. More on that later.

My Targeted Portfolio Allocation

Given my risk tolerance and personal preferences, my targeted portfolio allocation looks like this:

- Ethereum 40%
- Bitcoin 35%
- Stablecoins 20%
- Other Coins 5%

As you can see, I'm allocating about 75% of my portfolio to the two biggest coins in crypto. I like Bitcoin as a "store of value" and Ethereum as a network that offers a lot of innovation. I give a slight edge to Ethereum personally because I like all the utility it offers and see a little more upside with its migration to ETH 2.0 and future planned upgrades, but I could be wrong there so choose your own percentages.

Every crypto investor should build around these two coins as Bitcoin generally accounts for 40-45% of the overall market capitalization of crypto while Ethereum is roughly half of that coming in at nearly 20%. Outside of stablecoins, you don't gain a lot of diversification by going into other coins as the two biggest coins generally drive the price action of the rest of the coins.

I like 20% in stablecoins because unlike "fiat" currency, such as dollars or euros, you can actually get a very nice return on stablecoins once you know how to outpace inflation with high yields. You can also use these coins pretty easily to move in and out of fiat currency to make everyday purchases. Finally, owning stablecoins helps lower the overall volatility of my crypto portfolio.

As for the "other" coins, well who doesn't like to gamble a little bit once in a while. My advice here, once again, is to limit your exposure in this category by keeping it to a very small portion of your overall crypto portfolio. Unlike many who participate in yield farming, my crypto portfolio strategy drives my yield farming strategy as well and keeps me focused, limiting potential mistakes by taking risks on coins I don't believe in.

Chapter Two - BNB Chain (formerly Binance Smart Chain)

When you first start out on your yield farming journey it pays to specialize and really learn a niche within yield farming itself. My first suggestion here is to pick a network and only yield farm on that particular network for a while. By doing so, you will begin to get a good feel for the various platforms that exist on the network. You will also find the communities surrounding each platform tend to intersect making it easier to do networking within the network if you will.

There are other advantages to sticking to one network when starting off. You will get a really good feel for the fees on the network. Those fees will be paid in the network's main coin, so you will only have to keep enough for gas fees in one coin versus coins in every network you are farming on. You will also find various tools that can help which are unique to the network of your choice. Finally, you won't have to switch from one network to another within your wallet all the time.

For beginners, I would suggest starting out on the BNB Chain, formerly known as the Binance Smart Chain (BSC). While Ethereum is the biggest network for yield farming platforms, it is also expensive at the moment. For most starting out, you will be testing things out and learning about yield farming using smaller amounts of investment capital. The bigger the fee, the higher percent of your profits it will eat up. Unless you are putting in huge sums of capital, a $.50 transaction is much easier to swallow than one ten times that rate or more. Please keep in mind that yield farming includes multiple transactions as well, meaning multiple fees incurred.

While Ethereum (ETH) is the second-largest cryptocurrency, Binance (BNB) ranks in the top five along with Bitcoin (BTC) and two stablecoins - Tether (USDT) and USD Coin (USDC). In addition, the native stablecoin on the BNB Chain, Binance USD (BUSD), is a top ten cryptocurrency itself.

The BNB Chain also offers many great yield farming platform options to choose from. There is, however, one yield farming platform that anyone doing transactions on the BNB Chain must become familiar with.

PancakeSwap

PancakeSwap sits on the BNB Chain and has the most users of any decentralized exchange. This platform allows users to earn yield by staking LP tokens on any of its numerous yield farms. Users earn yield in the form of the platform's native token CAKE.

When yield farming on the BNB Chain, you will inevitably use the PancakeSwap platform. This is true even if you do not intend to do yield farming on the platform because you will still interact with PancakeSwap to get started with just about every yield farming platform on the BNB Chain.

Let's assume you want to start yield farming on Platform A in a farm that uses a liquidity pool (LP) token that combines the platform's native coin, ACoin and BNB (the native coin of the BNB Chain). In order to get into the ACoin-BNB pool you first need an equal value of BNB and ACoin tokens. PancakeSwap is where you will first go to "swap" some of your existing BNB tokens for ACoin. Once this is done, you will then go to the "Liquidity" feature on PancakeSwap and use equal amounts of BNB and ACoin to create your LP tokens.

With newly created LP tokens in your wallet, you will go back to the platform of your choice to stake the ACoin-BNB LP tokens into their farm and start earning rewards. Want to sell your rewards eventually? You will do those transactions on PancakeSwap as well by using the liquidity feature this time to split the LP token into the two underlying tokens that make it up.

This can be confusing at first, however, the step-by-step guide will walk you through this process. It will benefit you to become somewhat familiar with PancakeSwap as you will be using it throughout your journey yield farming on BNB Chain.

Chapter Three - Pegged Coins Yield Farming Strategy

Now that we have our overall crypto portfolio strategy in place and know that we will be focusing on the BNB Chain, it is time to build our yield farming strategy itself. This strategy focuses on two key areas, building up our targeted crypto coins and reducing risk.

The long-term goal is to build up our portfolio of Bitcoin, Ethereum and USDC. We will use yield farming as a method to do that with our farms, and the rewards that are generated from those farms will be building our positions in these coins by giving us exposure to the long-term price movement of both Bitcoin and Ethereum. This is the additional upside of our strategy.

We also want to minimize the downside. This is done by having some exposure to USDC, but more importantly by minimizing impermanent loss which we covered in chapter eight of the first book. We will accomplish this by using yield farms that utilize pegged coins.

What is a pegged coin?

A pegged cryptocurrency is an algorithmic token that is “pegged” to the price of another cryptocurrency or asset.

Most stablecoins are pegged to the US dollar and most have a value that is very close to $1.00. They do, however, have some slight variations in price so they can be priced below a dollar (under peg) or above a dollar (over peg).

This fact makes them popular to yield farm with because there is minimal impermanent loss risk. You suffer impermanent risk when your underlying coins in a LP token have different price movements. Since in a liquidity pool you will keep the same 50/50 value in the two coins, the pool must sell some of the tokens of higher value and purchase those of the lower value.

When you have two stablecoins that are both worth $1, there is no re-allocation needed to maintain a 50/50 balance so you always keep approximately the same number of each coin. Thus little to no impermanent loss and much less risk than other LP tokens.

Outside of stablecoins, let's imagine you have a coin called BitMirror (BM) that is pegged to Bitcoin (BTC). When BTC doubles in value, so does BM as the prices of each move in tandem. These two assets do not have to have the same price, but rather maintain the same ratio. For example, you could have a 30,000/1 ratio of BTC to BM. With a BTC price of $30,000, the BM price would be $1. If BTC jumped 50% in value to $45,000, the price of BM would jump to $1.50. Because the coins move together at the same ratio, there is limited impermanent loss risk.

Platforms have developed clever strategies to maintain peg with mechanisms for lowering the price when a token goes above peg and raising the price when it goes under peg.

Chapter Four - Tomb Forks

You now have the network you will be working on (BNB Chain), along with an overall crypto strategy (Bitcoin, Ethereum and US Coin), and a yield farming strategy (pegged coins). Now we are going to look at a specific type of yield farm to become familiar with and eventually master over time.

A “Tomb Fork " is not a utensil used for eating in a graveyard, but rather a platform that uses the code from a platform called Tomb Finance. Tomb Finance is a very clever platform built upon the Fantom Opera Network that has an algorithmic token called Tomb (TOMB) that is pegged to the network’s native coin Fantom (FTM). It was unique in its ecosystem design and the way all the site features interacted with one another creating an infinite money loop when used properly.

The beauty in the network lies not only in the way it manages its pegged coin, but in the ecosystem created within the platform. This is the secret sauce! It is also why so many other platforms have since copied the model and tried to improve upon it - we call these tomb forks.

How Tomb Finance Works

The TOMB token is pegged to the FTM token algorithmically and through various mechanisms within the platform. When the price goes above peg, the system automatically prints more TOMB tokens given as rewards to users and the additional supply brings the price back down. When the price goes below peg, the system allows users to buy TBOND’s which helps drive up the price of TOMB and allows users to later trade those TBOND shares in for discounted TOMB tokens once TOMB is back on peg.

The main driver of the Tomb Finance platform is the TOMB-FTM yield farm, although the platform does offer a number of other different yield farms. Each of these farms produce their yields in the form of Tomb Share (TSHARE) tokens.

These TSHARE tokens can then be staked in the Masonry (or Boardroom as it is called in other similar platforms) and users are rewarded every time period called an EPOCH (6 hours) in which the TOMB tokens maintain a time weighted average price (TWAP) at or above its targeted 1.01 peg. Rewards here are paid out in TOMB tokens. Those TOMB tokens can be used to build up the farms more or placed in other parts of the platform. Imagine an ecosystem where you hold A to create B, B to create C, and C to create A - that is what we call an infinite money loop.

Personally, I’ve never used Tomb Finance but I understand the basics of the platform because I’ve used other platforms “forked” from the same code. These Tomb fork platforms sit on the my preferred BNB Chain and have similar ecosystems. That said, each Tomb fork platform tends to have its own little unique features as well.

Tomb Fork Strategy

Are you confused? If so, that is ok. You will soon be able to explain to your friends that your “niche within crypto is yield farming via liquidity providing on the BNB Chain using Tomb forks utilizing a pegged algorithmic token strategy to one of your three target cryptocurrencies - Bitcoin, Ethereum and USDC”. Let’s face it, you will be the life of the party!

Even if your friends don’t understand you, they will be jealous of all the stuff you brought to the party thanks to all that passive income you made through yield farming.

Now to bring this full circle, imagine on the BNB Chain there is a Tomb fork yield farming platform tied to Bitcoin, and another tied to Ethereum, and yet another tied to USDC. Well this isn’t a dream, this is reality, so we will dig deep into one of these platforms as a starting point in the next chapter.

Selecting a Tomb Fork

You already know we will be working with Tomb fork yield farms on the BNB Chain tied to our coins selected in our crypto strategy. But which one do I choose and how do I begin?

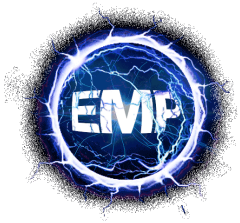
While I’m not a financial advisor, I will cover an Ethereum-pegged Tomb fork platform that I think is a great place to start for a number of reasons. First, I like building around Ethereum given the long-term potential I see in the coin. Secondly, the platform I'm going to suggest is perhaps my favorite among all the Tomb forks out there.

This platform has a development team around it who are “doxed" (known publicly) and are excellent communicators which is fairly rare in the crypto world. In fact, they hold a daily chat starting a little before 7:00 pm EST in the United States on both Telegram and YouTube every day which revolves around rewards on two of their unique platform features. This platform is robust and complex, but they offer an academy to learn about the whole platform that is both in written and video formats. The platform has a growing TVL (Total Value Locked) as more and more investors are discovering the platform daily. The project has been externally audited. It pretty much checks all the boxes for me.

In a nutshell, the right coin on the right network with the right development team is a great starting point to start your yield farming adventure so let’s dive in.

Chapter Five - EMP Money

EMP Money is a Tomb Finance fork with an interesting ecosystem that includes farms, staking, nodes and much more making it an all-in-one DeFi platform. The EMP decentralized algorithmic coin is pegged to Ethereum (ETH) at a 4000:1 ratio. It sits on the BNB Chain and offers many different strategies you can employ to take full advantage of the platform.



While EMP Money can be fairly complex given all the features, they also make it pretty simple as you can just approve the "Execute Strategy" start button. Using this strategy, the platform does all the work investing into a couple different farms in the system using an 80% 'safe' and 20% 'risky' strategy. The initial investment yield farms includes a pairing of their EMP token with ETH (80%) which limits the impairment loss usually associated with yield farming since the EMP is pegged to ETH. The other farm is an ESHARE-BNB Liquidity Pool (20%) and is the more risky of the two, but generally pays out higher rewards. I started with this strategy but have changed the investment mix since then as I learned more about the whole ecosystem.

How to get started with EMP Money

You will need either BNB or BUSD to get started. I simply bought some BNB (recommended so you also have the coin for necessary gas fees) from my crypto.com account and then transferred it to my MetaMask wallet. This wallet is where I interact with most of these projects (click here if you need to see how to connect MetaMask to the BNB Chain). From there you go to the EMP Money and click on the BUY EMP button which will take you to PancakeSwap. You will have to import the token (address = 0x3b248CEfA87F836a4e6f6d6c9b42991b88Dc1d58) whose address you can find on BscScan if you don't want to copy from above.

Note: You will also want to import the token into your MetaMask wallet under the BNB Chain network using the same address like all new tokens.

Once you have purchased the EMP in your MetaMask you can simply click the Start button under "Execute Strategy" and you are off and running or you can select the exact portions of the platform you want to invest in. Or you can invest directly into the farms and other features as you see fit after going through the academy which I would recommend first.

EMP Money Yield Farms

Yield farming is critical to the platform, providing liquidity and making EMP sustainable while keeping the token above peg. There are three yield farming liquidity pools (LPs) on the platform all being conducted on PancakeSwap.

- EMP-ETH LP
- ESHARE-BNB LP
- ESHARE-MBD+ LP

The EMP-ETH liquidity pool is the engine behind the entire platform and the best place to start. The ESHARE-BNB is riskier with the potential for impermanent loss with the volatile ESHARE tokens paired with BNB, but offers larger returns. The platform's final yield farm, ESHARE-MBD+, makes up the third farm but is not a farm I would look at when starting out.

All of these farms pay out in the ESHARE token which can be used in other areas of the platform including the Boardroom.

EMP Money Boardroom

The Boardroom is one of the areas where you can stake your ESHARE tokens gained from the yield farms. In this section, you get rewarded when the EMP is greater than its peg target of 1.01.

The timeframe to claim is called an EPOCH, just like Tomb Finance, and lasts six hours so there are four timeframes that produce rewards each day when staking ESHARE in the Boardroom.

The Boardroom is also a tool to help keep EMP near its peg, acting as a fractional share of Ethereum, much like a Satoshi is to a Bitcoin. When the EMP price exceeds the peg, the platform will create more EMP tokens and distribute them to users through the boardroom which helps push the price back down towards the peg due to the additional supply.

EMP Money Detonator

The Detonator has been built like another platform called the DRIP Network with rewards that can be paid out multiple times per day. Here you can stake your EMP-ETH LP into the pool and earn back a return of 365% if you claim them every day, however you will get even more if you

compound the rewards back into the Detonator. Rewards can be claimed or compounded and the payout is virtually risk free which is unique in DeFi.

Once you deposit LP into the pool it can never be reclaimed, just your rewards throughout the day which reset at 12am UTC which is 8pm Eastern time in the US. They also have added a lottery component which rewards multiple users every day including the largest depositor, a random depositor and also allows for an instant winner. Payouts from these lotteries are huge which motivates new capital to flow in everyday with a lot of activity in the last ten minutes before the reset. This is when you will get the maximum amount to claim or reinvest. It is also when investors try to “snipe” or place the largest deposit of the day, which often happens within the last sixty seconds before the reset. This is also the timeframe the daily voice chat revolves around making it an exciting time of day on the platform.

If you are a fan of the ROI (return on investment) platform DRIP, you will love this feature. You must also use this feature to be able to gain referrals by depositing a minimum of .15 of the EMP-ETH LP token. The Detonator in many ways is the “secret sauce” of the platform given all the new capital that is constantly flowing into it.

EMP Money Reactor

The Reactor is the newest feature of the EMP Money system and is built on (or formed from) the Detonator code, however, it uses the ESHARE-BNB LP token instead of the EMP-ETH LP token used in the Detonator. Since it is virtually the same in terms of rewards, lottery, etc., we will leave the discussion here.

EMP Money Nodes

The nodes feature allows you to purchase nodes to generate EMP. There are five different kinds of nodes:

- Nano Node (cost = 500 EMP, 1.0 multiplier)
- Mini Node (cost = 1,000 EMP, 2.1 multiplier)
- Kilo Node (cost = 2,000 EMP, 4.41 multiplier)
- Mega Node (cost = 4,000 EMP, 9.261 multiplier)
- Giga Node (cost = 8,000 EMP, 19.4881 multiplier)

Like the Detonator, EMP deposited into nodes are burned and will not be returned. Nodes are designed to give up to a maximum of a 400% return on your deposit. Unlike other node projects,

they are backed by the Treasury which is unique to EMP Money. A portion of every Boardroom print gets allocated to the Treasury and goes back to the nodes. The EMP paid out is already in the ecosystem and not produced via inflation.

EMP Money Bonds

There are three kinds of bonds available, EMP bonds, ESHARE bonds and EBOND bonds. The bonds help the ecosystem overall when EMP falls below peg. The bonds help push the price of EMP towards its peg, having the opposite effect of the Boardroom printing EMP, and depleting the supply in circulation. These two features, in conjunction, put buy or sell pressures on the EMP token to make it always move towards the peg ratio, but with the overall goal of keeping the token slightly above peg. You can trade bonds in for EMP once the token is above peg at a premium giving you a nice return for helping out the platform.

EMP Money Auto Vaults

You can automate your yield farming here through Beefy Finance, YieldWolf and my personal favorite Magik Farm. Using these external platforms, you automatically compound your rewards back into your LP Token farms without deposit or withdrawal fees. The payouts here are pretty attractive and no manual compounding is required on your part making them perfect for those who want to invest and forget about it for some time.

Winning Strategy

One of the team members, Crypto Mike, discusses what he deems the winning strategy on YouTube. His strategy can be broken down into:

- 60% into Yield Farms earning ESHARE
- 40% into Boardroom to claim ESHARE rewards when EMP is greater than the peg

I prefer starting with simply putting your initial investment all into the EMP-ETH yield farm, but you must decide your own best starting strategy. The key is just getting into the platform and building up the various parts to create a passive income stream as you see fit. I'm also a very big fan of getting into either the Detonator or Reactor if you have enough to start with. I'd suggest around $500 to make compounding daily worth it in terms of gas fees.

My EMP Money Ecosystem Strategy

After claiming ESHARE tokens from my EMP-ETH farm, I put them into the Boardroom once they hit a value worth moving over and if it is printing (above peg). I'd suggest waiting until you have at least $10 worth of rewards to minimize the effect of gas fees. The Boardroom rewards you in EMP tokens and I then take these and pair with Ethereum to place into the Detonator. You do not want to sell or "zap" EMP tokens which hurts the system, you can however convert ESHARES rewards into ETH to pair with EMP.

Here I'd wait until the total EMP tokens and ESHARE (or ETH) are worth more than $250 each ($500 total) to make compounding worth it in the Detonator. The Detonator rewards you in EMP-ETH LP tokens, which is a great way to gain Ethereum if you want to split back out the LP token. I prefer to take these rewards and place them back in my EMP-ETH farm to start the process all over again.

- Farms --->ESHARE (to be put in Boardroom)
- Boardroom ---> EMP (to be put in Detonator paired with ETH)
- Detonator ---> EMP-ETH LP (to be put back in the EMP-ETH Farm)

Your ultimate strategy may change based on how much you are investing and exactly how EMP is currently sitting in relation to its peg and your risk tolerance. When the Boardroom is not printing, I convert ESHARE to EMP and save up a minimum of 500 to start a nano node.

EMP Money Final Thoughts

EMP Money is a great platform for yield farming if you are bullish on the long-term potential of Ethereum. Of all the Tomb forks, it is my personal favorite for all the reasons listed above. You can also stake ETH directly on the site which generates very solid returns of 100% per year.

While there is a lot of information above, please keep in mind that you will likely start by just adding to the EMP-ETH farm, learning and growing from there. There will be exact steps on how to begin this process later. You can find more information and link to their communities on Twitter, GitHub, Telegram and Discord.

I personally think EMP Money is the best Tomb fork currently on the BNB Chain for someone new to this to get started. The daily chats and the online academy can really help boost your knowledge in the beginning. Once you have been in EMP Money for a while, the other Tomb fork platforms will make sense as well since they are structured similarly.

Chapter Six - Dex Finance

Dex Finance is a decentralized autonomous organization (DAO) that pegs their native coin USDEX to the stablecoin USD Coin (USDC), which is considered the safest of all the stablecoins. This is one of the many brilliant aspects of Dex Finance which sets it apart from similar protocols and makes it a great choice in both bull and bear markets.

USD Coin is one of the three main coins I focus on in my portfolio, along with Bitcoin (BTC) and Ethereum (ETH). Holding USDC in your portfolio helps reduce the overall volatility of the other two coins. The problem with holding USDC is the loss of purchasing power due to inflation, however, this can easily be offset by using a protocol whose rewards far outpace inflation like Dex Finance which launched in May of 2022.

Most Tomb forks rely on investors to maintain the price of their pegged coin. They use "bonds" which allows investors to purchase future tokens at current prices when the token is below peg (or at a discount). This puts an upward price pressure on the coin to help move it back to the peg price. Unfortunately, if the coin never returns to peg, the bonds are worthless so there is a lot riding on the community to make everything work out. Dex Finance doesn't use bonds and rely on investors to maintain peg, instead the platform uses smart contracts that allow the protocol's underlying mechanism to dynamically buy and sell the supply of USDEX, pushing its price up or down relative to the price of USDC to reach the peg price.

This unique way of maintaining peg in a Tomb fork sets Dex Finance apart from others making it healthy financially regardless of what investors are doing within the system. This also allows it to continuously pay its investors in every part of the protocol. The entire ecosystem is set up as a "money market" all working together to build investors wealth over time.

Dex Finance Farms

Like all Tomb forks, the main engine of the platform is the farms, specifically the farm that matches their native coin to the pegged coin. In the case of Dex Finance, this is the USDEX-USDC farm. The reason I love pegged coin farms is they virtually eliminate "impermanent loss" associated with other types of yield farms since the coins always maintain the same value ratio. The rewards here are impressive with an APR (annual percentage rate) that has remained very high despite limited risk. Think about that, you are getting huge returns without impermanent loss on a stablecoin pairing of coins.

As with other Tomb forks, Dex Finance does offer other farms including their rewards token DEXSHARE paired with BNB. This DEXSHARE-BNB farm does offer an even higher APR than the main farm, however it does come with impermanent loss risk and is based on underlying volatile crypto. I generally allocate a small percentage of my investments in Tomb forks to the rewards token farm, but do not want too much exposure here. Their third farm matches two of the platform's own tokens, again like most Tomb forks, in a very interesting way but I would not suggest getting involved here until you really know your way around.

Once you have your farm up and running you are paid constantly in their reward token DEXSHARE. But what do you do with the DEXSHARE earned?

Dex Finance Regulation

Most Tomb forks have a "Boardroom" which is an area where the platform users stake their reward tokens and earn the native token. Generally, these are paid out in EPOCHs or periods of time such as every six hours. To pay out, the TWAP (time weighted average price) of their native token has to remain above peg over the EPOCH.

In Dex Finance, they call this area Regulation and it works differently than most Tomb forks. First, it pays out continually so you don't have to wait for an EPOCH to conclude to get your rewards. Furthermore, they do not pay out in their native coin USDEX, but instead pay out in something called DEXETF which is very unique and explained below. While many Tomb forks can struggle to stay above peg, this doesn't appear to be the case with Dex Finance as they tend to stay well above their peg of 1 USDC. This results in the Regulation area of the platform always paying out. I would say this is the secret sauce of Dex Finance, especially given the uniqueness of DEXETF as a reward token.

Dex Finance DEXETF

Getting paid out of Regulation in DEXETF tokens is one of the more unique features to the platform. For those familiar with stocks, an “ETF” is an exchange-traded fund which is similar to a mutual fund but it typically acts as an index that tracks a particular asset or group of assets. The DEXETF is similar but it is actually made up of multiple cryptocurrencies.

The asset allocation in the DEXETF includes BTCB (Bitcoin on the BNB Chain), ETH (Ethereum), WBNB (wrapped Binance Coin), BUSD (Binance stablecoin), CAKE (PancakeSwap), XRP, ADA (Cardano) along with three tokens from the platform (DEX, USDEX and DEXSHARE).

Essentially, you are rewarded in a full portfolio of blue chip cryptocurrencies so as the entire market grows your holdings grow along with it. Since DEXETF is a token, you can also sell your token or "burn" (convert) it to USDC, BNB, BUSD or other tokens of your choice if you don't want rewards in all the different tokens.

Dex Finance DEXIRA

Before the launch of the Dex Finance site we know today, the developers had already developed and launched DEXIRA. In the finance world an "IRA" is an individual retirement account which is an investment aimed at helping one retire. The DEXIRA was launched with a similar aim, however focused on cryptocurrencies instead of stocks in something similar to a money market fund.

By holding DEX tokens, the DEXIRA allows you to get paid out in the currency of your choice, over 20 in total, with the default being BNB. This is a long-term play with a 30% sales tax waived for tokens held over a year which is what I would recommend. In order to participate you must hold over 10,000 DEXIRA tokens which may sound like a lot but given the low price of each DEXIRA token is quite affordable.

Dex Finance Final Thoughts

Dex Finance has been one of my best performing assets during the bear market and I rank it just behind EMP Money in terms of the quality of the platform. While it is also a complex system, one can start by getting into the USDEX-USDC farm and taking the rewards from that and staking them into the Regulation section. I really like the unique features that separate it from other Tomb forks including the manner in which the protocol maintains peg. The fact that the coin is tied to USDC is a huge plus as their other tokens expose you to blue chip cryptocurrencies. Being able to choose what token you would like to be paid out in is also a great feature. You can find more information in their documentation.

Being a new platform, there will be new features added including a unique take on bonds that aren't needed to help maintain peg but offer additional profit potential. They will also be adding dexPAD allowing you to participate in crypto project launches via your DEXIRA tokens. They will also be adding ways to "zap" into one of three strategies - conservative, balanced, and aggressive soon which will automate everything for you based on your risk tolerance.

If interested in finding out more, there are a few YouTube videos out there on the protocol that are quite helpful.

Chapter Seven - Other Tomb Forks and Non-Tomb Forks

Once your EMP Money and/or Dex Finance investments are up and running smoothly there will come a time when you should look to diversify further. The good news is that once you have the basics of either of the first two platforms down, these other platforms will seem much more familiar. You are becoming a seasoned yield farming veteran. Do not rush into more yield farms, in fact I would suggest waiting until your EMP Money EMP-ETH yield farm, your Boardroom, and your Detonator are all doing well before venturing out.

After you build up the key parts in the EMP Money ecosystem, you can begin to take some of the profits (ideally in ESHARES from the farm), and put them into another yield farm. Because Ethereum is a relatively risky play, I would suggest going into a stablecoin yield farm, particularly USDC next with Dex Finance.

Ames Defı

Ames Defi is another Tomb fork on the BNB Chain and an alternative to Dex Finance. The AMES token is pegged to the Binance USD (BUSD) stablecoin making a lower risk project as well. The strategy here is nearly the same as you should start in the AMES-BUSD yield farm and eventually move the profits (which come in the form of ASHARE tokens) into their Boardroom. The Boardroom rewards you in AMES tokens which can be put right back into the yield farm.

Ames Defı also has a Quarry which is their nodes program with two options, an AMES node and an ASHARE node. The platform also has an ABOND feature which helps keep AMES above peg. You can also find more information in their Docs (documents), Strategy, and Autocompounder sections of the website. I personally prefer Dex Finance to Ames due to peg stability, but Ames offers further diversification with some strong staking rewards for holding their main coin.

Bomb Money

Bomb Money is a Tomb fork on the BNB Chain that focuses on Bitcoin. Their native BOMB token is pegged to Bitcoin at a 10,000:1 ratio. The main yield farm is their BOMB-BTCB LP token farm. The platform offers rewards in terms of BSHARE tokens and their bonds are called BBOND tokens.

Bomb Money has another token, XBOMB, which can be obtained by staking BOMB tokens. You can also stake Bitcoin (BTC) on the site much like EMP allows you to stake Ethereum (ETH).

Bomb Money does have its own Boardroom which functions like all the other platforms versions. They also offer vaults to those so inclined. While I like the idea behind the Bomb Money platform, they have struggled to stay above peg which limits Boardroom profits and which is why I would look at other alternatives until it can maintain peg

GoldMint Finance

GoldMint Finance is a Tomb fork, however it is pegged to the price of PAXG which is a cryptocurrency backed by one fine ounce of gold for every coin. This is an interesting twist. Many had hoped Bitcoin would be a good hedge against inflation, but it hasn't held up that way recently. Gold, on the other hand, has historically been a solid hedge against inflation.

Their GLDM token is pegged to the price PAXG and the site has all the features you expect in a Tomb fork project. If you would like to add some gold to your strategy, this might make sense. GoldMint does not sit on the BNB Chain, however, so I'd look to this one further down your journey as you move onto projects on other networks.

Future Tomb Forks

Tomb forks are gaining popularity, especially on the BNB Chain. While it is great to have so many options and I'm excited to see all the future versions that pop up, I do have concern that they will compete with each other for investment capital making them more vulnerable to failure. As such, it is very critical that you research the projects thoroughly and pick the best ones that fit your strategy and risk tolerance.

Chapter Eight - Step-by-Step Walkthrough

Congratulations on getting this far! You read about yield farming terminology and concepts in book one and discovered a strategy you can start with in this book. Ready to really get going? This step-by-step walkthrough section has been built for beginners so feel free to simply skip past any of the ten steps you have already taken in your own crypto journey.

Step One - Create a unique Google email account just for crypto

For security reasons I like to keep my crypto accounts separate from everything else in my life which is why I have a Gmail account strictly used for crypto. If one of my stock brokerage accounts gets hacked, I don't want any connection to my crypto and visa versa. You should also have a unique password for your crypto Gmail account and I'd strongly suggest writing it down.

Step Two - Use a unique browser for all your crypto activities

Do you use Chrome for all your normal internet activities? If so, pick a different browser for crypto. Personally, I use the Brave browser which is more secure and offers private browsing on the internet. As a bonus, the browser blocks ads but you can choose to receive pop up ads and get rewards with BAT (Basic Attention Token) crypto every time you open an ad.

Step Three - Select an exchange to purchase your crypto on

There is a long list of potential exchanges to choose from with your individual location being a big factor. For example, Binance is a major exchange throughout the world but in the United States they offer Binance.us which has much more limited functionality.

I personally use Crypto.com, Coinbase and KuCoin, but am not married to any of them and feel free to use any of the referral links provided. Many exchanges will require a KYC (Know Your Customer) process which will involve providing identification information and proof of your residence which can take a little time.

Step Four - Fund your exchange

This is the step where patience really comes in. There are different ways to move fiat currency like US dollars or euros into an exchange. With some exchanges, you can simply link a credit card and off you go. Personally, I'm not a fan of any kind of debt. That said, I'm also not a huge

fan of traditional banks and trying to send a wire transfer or make an ACH deposit is sure to take time and be frustrating depending on your personal bank. Expect this step to take up to two weeks to go through so you can skip ahead to step five as you are waiting to complete this step.

Step Five - MetaMask Wallet Download and Install

While waiting for your exchange to get funded, feel free to skip to steps five and six. This may be one of the most technical aspects of your journey, but you have time on your hands now. MetaMask is the wallet I would suggest using to interact with your yield farms. You will want to add it to your browser as an extension by downloading it. While the default might look like a Chrome extension, there should be options for other browsers including Brave at the bottom.

Once downloaded and installed, MetaMask will be an extension on the browser you are using. Initially it may appear as a web page, but as you interact with it going forward it will often just be a pop up window that you access through your browsers extensions.

IMPORTANT - make sure to write down your password. More importantly, make sure to write down your 12-word key phrase. This gives you access to your wallet should you ever have a problem. Even more important, NEVER share this key phrase with anyone or they will have access to your wallet. Also, do not put your key phrase anywhere connected to the internet unless you want to be hacked and have all your crypto stolen. This is actually financial advice!

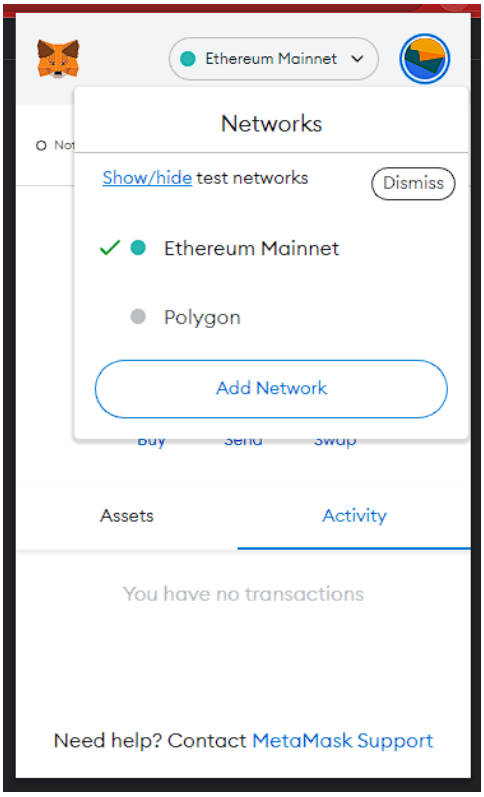
On the Brave browser, you can access your extensions in the upper right hand corner in what looks like an ink spot. Click on that or click on the three lines to the right of that and go down to extensions to access your MetaMask wallet.

Initially, your wallet will say “Account 1” on the top and the network drop down will say “Ethereum”. The bad news is you will have to set up the BNB Chain network and add any tokens you want to have on it, the good news is I am here to help you through that step as well.

Step Six - MetaMask Wallet address and BNB Chain

Directly below your “Account 1” is your wallet address which is your key to interacting with any of the yield farming platforms. You can access this by clicking on the square to copy it. Your wallet address is your identifier in the crypto world. Think of it like your home address and it is where you will send your crypto. You can give this address out without fear as nobody can use this to take tokens out, only to put tokens in.

My MetaMask wallet address is"0x6Ddf2e66399B5DfE4753eE9fcB6D40B9E933d2f2" and feel free to send any tokens my way as a 'token' of your appreciation (pun intended) for all the hard work I put into teaching you how to yield farm. As you may notice, this address is quite long so when you are sending your first bit of crypto here from your exchange make sure to copy and paste it exactly to ensure it arrives where it should. In fact, get one letter or number wrong and kiss your sent crypto goodbye.



To set up the BNB Chain first click on the button that says Ethereum Mainet and select "Add Network". Then fill in the following information:

- **Network Name:** BNB Chain
- **New RPC URL:** https://bsc-dataseed.binance.org/
- **ChainID:** 56
- **Symbol:** BNB
- **Block Explorer URL:** https://bscscan.com

You have now successfully set up your MetaMask wallet to work on the BNBChain network. Well done!

Step Seven - Buy BNB on your exchange and transfer the BNB over to MetaMask

Once you have waited long enough, your funds should show in your exchange. It is now time to make that first crypto purchase. Wipe away that sweat from your brow and go ahead and purchase some BNB coins. Most exchanges will charge you a percentage or flat dollar amount to purchase crypto. There may also be a fee to transfer funds so it may be wise to leave an extra $10 or so in your exchange account when you are purchasing BNB just to be sure.

Once you have your BNB purchased, it is time to transfer them to MetaMask. Make a mistake here and they are gone forever. There are two key things here you must get absolutely correct.

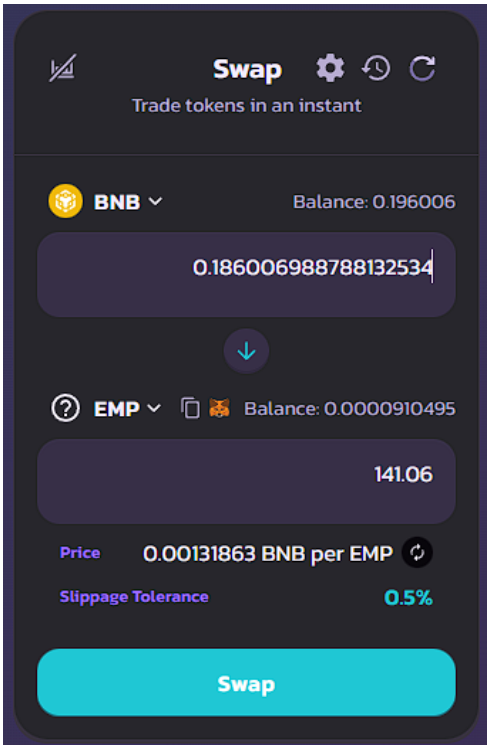
First, make 100% sure you are sending them to your MetaMask account number. You can do this by copying and pasting the address. If you are using an exchange on your phone yet your MetaMask is on your computer, I would suggest copy and paste the address from your

computer into an email and send it to yourself. Then on your phone, pull up the email and copy it from there. Once you paste it into your exchange, double check the first few characters and last few characters to make sure they match.

Second, your exchange should ask you what network to send the coins on and it is equally important you get this right. If not, it is like sending some mail to the right street address but to the wrong country. You should select the “Binance Smart Chain” or “BNB Chain” as the network. In crypto.com, they give you the option of BEP-20 but do not select that option. The new address may be “whitelisted” in the exchange meaning you have to wait another 24-hours before you can actually send the BNB to MetaMask. Also, once you hit send it will take a few minutes for the transaction to complete so don’t panic if you don’t see it in your MetaMask wallet immediately.

Step Eight - Connect your MetaMask to EMP Money and create LP Tokens on PancakeSwap

You are almost done! The remaining steps don’t take much time and they will become easier each time you do them. Once your MetaMask wallet has the BNB funds it is time to connect to EMP Money. To do this, go to EMP Money and hit the “Connect Wallet” button selecting MetaMask. You will then be prompted to confirm this. Next you will then see the first five and last three characters of your address on the right hand side which confirms you have connected your wallet.



At this point bookmark the site. In crypto there are many fake sites that look just like the real thing, it is important to always go to these sites through bookmarks and not simply google them which can bring up the fake sites with ads pointing you in the wrong direction.

There are many ways to get started but I suggest going directly to the PancakeSwap BNB/EMP swap page to buy some EMP tokens. This will take you to PancakeSwap, another site you will have to connect your wallet to. You will be making three transactions on the site, but first you must determine how much BNB to leave in your wallet and I would suggest between $25-$50 worth to pay your transaction (gas) fees for some time. If one BNB coin is worth $300, then 0.1 would be worth $30. Count up the remaining coins after accounting for what you want to leave in your wallet and divide that number in half, this will give you how much BNB you will put in to purchase each of your two coins.

Purchase EMP - Initially your swap will show ETH on top and EMP on the bottom if you didn't use my direct link above. Click on ETH and change it to BNB in this case. Put the amount you calculated above, half of the BNB you will be putting into the farm, where it currently shows 0.0 under BNB and PancakeSwap will calculate the amount of EMP you will receive. When done, hit the SWAP button and confirm the transaction.

Purchase ETH - Repeat the above steps, still putting BNB up top but putting ETH on the bottom. You should be able to put in the same amount in terms of BNB before hitting SWAP again.

Create LP Token - The final step on PancakeSwap is to combine these two sets of coins together into a single EMP-ETH LP Token. To do this, hover over the TRADE tab up top and choose LIQUIDITY. Next, at the bottom hit the + ADD LIQUIDITY button. First type EMP into the first currency, if it doesn't bring up the token paste in the token's address - 0x3b248cefa87f836a4e6f6d6c9b42991b88dc1d58. Then select MAX. For the second currency type in ETH. It will put in the appropriate amount of coins, don't worry if you have a small amount left over. If it says "Insufficient Balance" at the bottom, select MAX for ETH instead of the EMP. Once everything is ready to go, hit the SUPPLY button and confirm on your MetaMask.

You have just created your first EMP-ETH LP tokens. Nice Job!

Step Nine - Create your Yield Farm on EMP Money

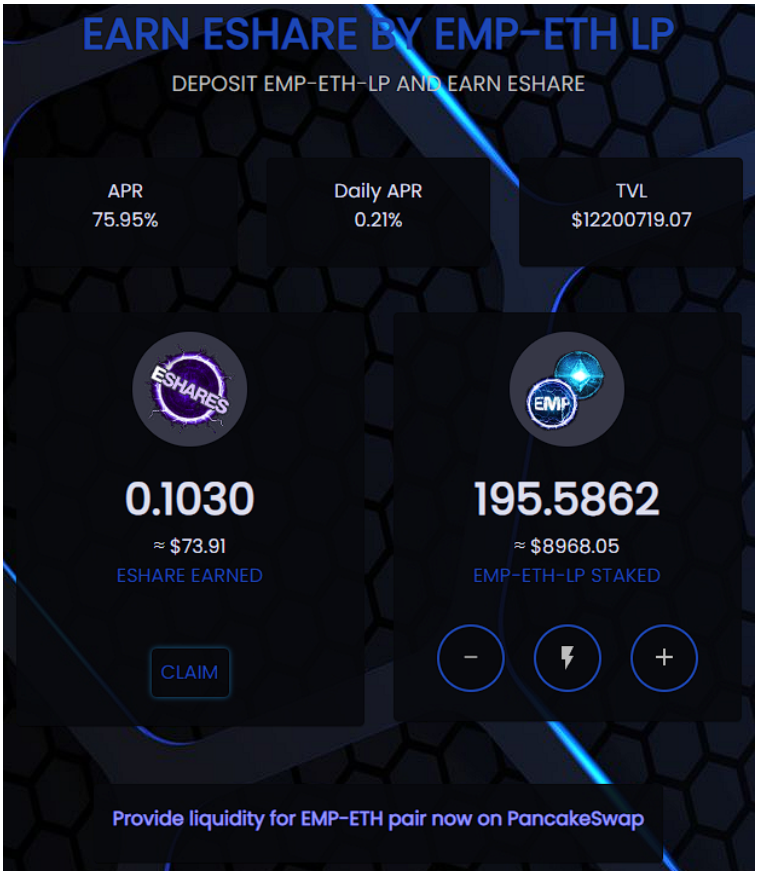
All the hard work is now done, just one last step and your yield farm is up and running. The good news is this step is pretty easy. Open EMP Money once again and click on the FARM tab in the top left menu. You will be entering the first farm listed, EMP-ETH-LP by clicking on the VIEW button. On the next screen, hit the APPROVE EMP-ETH-LP button and approve on MetaMask. The screen will change to give you new options and you will simply hit the + button. Add the MAX amount of LP tokens then hit CONFIRM on the site and then confirm on MetaMask.

You have done it! Your yield farm is up and running and you are making passive income.

Step Ten - Collecting your rewards

It will take a little time at first but soon you will see ESHARE EARNED appearing in your farm. This is the reward for all your hard work and when you are ready you can claim them using the "Claim" button which will transfer the rewards to your MetaMask. But not so fast. Since there are gas fees when collecting rewards, you want to make sure you have a decent amount to collect. If the gas fee will be $0.50, it would be wise to wait until at least $10 to collect or even more.

The amount of rewards will be determined by how much you invested into the farm which determines the overall percentage you own along with the APR which is constantly changing.



Once you “Claim” the ESHARE tokens, a good strategy would be to go to the BOARDROOM, stake the ESHARE tokens and get rewarded with EMP tokens every six hours when the price of EMP is above peg. You can use those rewards and put them back into your farm or other parts of the ecosystem.

Another Starting Point

If you want to be more conservative to start out I would suggest following similar steps but within the Dex Finance ecosystem. You won’t have the volatility of Ethereum to worry about. I really like the Dex Finance platform as well and you can learn the ropes of yield farming with more limited financial risk but also with less upside.

The main goal of all of this is to explain yield farming to you and help you find a starting point. There are many ways to go about it and with YouTube you can find step-by-step instructions to do almost anything including crypto.

Chapter Nine - Securing your Crypto

Once you've made it through the ten steps above and have built up your crypto holdings it is time to start thinking about keeping your crypto "bag" safe. I'd suggest coming up with a number in terms of your total holdings when you really need to make sure you secure everything. Perhaps $1,000 is a lot for you? Maybe $5,000? Whatever figure it is, when you finally do hit that number it is time to lock things down.

What is a Hardware Wallet? Private Keys vs Public Keys

A hardware wallet is a set of "private keys" that you store offline that often looks like some sort of thumb drive. The private keys are what is needed to access or send your crypto. Public keys, on-the-other-hand, are used to receive crypto and thus can be shared with no downside (unless you see someone sending crypto to you as a downside).

Because you store your private keys offline (in a "cold" hardware wallet), your crypto is much safer. A private key is similar to your email password that once given away, whoever holds that private key has equal rights to the crypto due to the decentralized nature of our beloved digital currencies. Without the physical hardware, outsiders cannot interact with your wallet.

A Hardware Wallet does not actually store your Crypto

A hardware wallet doesn't hold your crypto, it just holds the (private) keys to access it off the blockchain. This was critical for me to understand this as I like to have my crypto work for me earning interest, etc., so the thought of my crypto just sitting there on a hardware device not growing outside of simple price appreciation was not very appealing.

What a hardware wallet is basically doing is controlling the keys to access your crypto even though it is stored on a public blockchain. It can be used in conjunction with your MetaMask.

Which Hardware Wallet should I choose and how do I purchase one?

The two most well-known hardware wallet manufactures are Ledger and Trezor. Both companies make solid products, just do a little comparison to figure out the best fit for you. It is very important to buy a hardware wallet directly from the manufacturer to ensure it hasn't been tampered with. Forget Amazon or any third-party sites for this purchase.

Chapter Ten - Other DeFi Projects

There are so many DeFi projects available, but it is very important to DYOR (do your own research) before jumping in. I typically like to start with a small amount which lets me test out all the addresses and make sure I get the funds to the right space. As important, I like to test out the mechanics of each project before fully diving in. This helps me understand the best approach to get the most out of each project and gives me time to get to know the community associated with it.

NFT Passive Incomes

I like NFTs that have utility built in, particularly passive income. There are many NFT projects now that offer a variety of income streams. One of the problems is they often have limited mints, meaning only so many NFTs in a collection to get involved. You can, however, still purchase many of these on a NFT marketplace such as OpenSea after the fact.

The first project of this kind I got involved with was called Hydro Whales Mining Club which are NFTs that produce income via Bitcoin mining powered by hydroelectricity. Mining is what first brought me into cryptocurrency, but with Ethereum moving to a Proof of Stake model, mining will take a big hit. These NFTs give me a mining income stream without having to purchase and house the equipment, which is expensive and loud, and without having to worry about the technical aspects or electricity costs associated with mining.

I've personally created a similar NFT project that revolves around yield farming which we will cover in chapter 14.

DeFi Projects of Interest

I'm involved in or interested in a number of different DeFi projects. While diversification is a goal, getting involved in too many can make it difficult to manage them all fully. I have quite a few alarms on my phone each day that alert me to one project or another when it comes to compounding time.

These projects can be quite risky and often the best strategy is to get in early, get your return on investment back, and play with pure profits. This is easier said than done and some projects don't last long at all.

Chapter Eleven - Crypto (Blockchain) Bridges

Now that your interest might be peaked in projects on networks other than the BNB Chain, you need to know how to swap coins from one network or blockchain into another. If you have only been doing projects on the BNB Chain but want to try out StableFund using MATIC, you will need to set up the Polygon network on your MetaMask wallet, import the MATIC token, and then swap BNB for MATIC.

Swapping one token for another on the same network is easy and most exchanges can handle this. Exchanging a token from one network to another requires what is called a crypto bridge.

What is a Crypto (or Blockchain) Bridge?

One of the biggest issues of blockchain technology is the ability of blockchains to work together. Imagine if the countries of the world didn't have the ability to work, or trade, with each other. What sort of world would we live in? Now imagine a similar issue existing in the world of crypto. The advent of bridges aimed to solve this issue.

A crypto bridge also can be known as a blockchain bridge or cross-chain bridge. These bridges connect two blockchains together which allows for users to exchange one cryptocurrency for another across different blockchains. Crypto bridges enable token transfers along with smart contracts and other forms of data exchange between different blockchains. Token transfers, however, are the most common use currently on bridges

What if you want to purchase something with Ethereum (ETH) but you only have Binance Coin (BNB) in your wallet? Unfortunately you can't simply exchange these for one another within your MetaMask wallet or on a DEX like PancakeSwap. Fortunately, you can connect your MetaMask wallet to a bridge and make this transaction happen.

Interoperability

Interoperability is the ability of computer systems or software to exchange information. Bridges bring interoperability to crypto. This is similar to funding your PayPal account from your bank as two different systems are now working together seamlessly. You can then use PayPal to pay off your Visa. Crypto Bridges basically serve this same function connecting different networks.

Please see Appendix E for a list of various crypto bridges.

Chapter Twelve - Launchpads

Crypto Launchpads are platforms utilized for launching new tokens or projects, injecting much needed liquidity to get things kicked off. Commonly referred to as an IDO (initial DEX offering), it is the fundraising approach that blockchain or crypto projects use most often.

Launchpads offers investors an opportunity to get involved in projects early, before they are listed publicly.

ICO (initial coin offering)

Before IDOs there were ICOs which were unregulated attempts to raise money for new coin/token and project launches. These started in 2017 and created millionaires, but also a lot of critics in the process. The lack of controls and investor protection in ICOs were the main issues leaving many burnt in the process.

Offering huge returns, the downside turned out to be simple money grabs and scams. These issues lead to the formation of IDOs instead.

IDO (initial DEX offering)

An IDO is a way to pool investment capital from a number of investors. While ICOs often deal with centralized exchanges, IDOs deal with decentralized exchanges (DEX) on projects that are vast in scope and difficult to comprehend. As such, they often raise smaller amounts than their ICO counterparts.

In an IDO, the DEX provides immediate liquidity to the project. When the project launches, investors can immediately begin to trade their tokens. Those who invested early in the project, before launch, get their tokens at a discount and can begin selling at higher prices once the IDO goes live.

Please see Appendix F for a list of various launchpads.

Chapter Thirteen - Airdrops

Airdrops are basically free tokens or NFTs given out by a new project typically for performing some simple tasks. They act as a marketing tool to help raise awareness of the project and generate some hype around the launch of a new token. By doing an airdrop, the project increases their number of followers, expands their user base, and increases the number of holders of the coin or token. Airdrops can also be used to reward existing users or token holders with new tokens.

Most airdrops consist of a certain amount of tokens given away for doing tasks such as registering and subscribing to the project's social media channels such as Twitter, Telegram or Discord. After the tasks have been completed you can claim the airdrop if that is a requirement or the tokens will be automatically sent to your wallet.

There are five different kinds of airdrops:

- *Standard airdrop* - tokens are distributed for free without having to perform any particular tasks other than creating an account and supplying your wallet address
- *Bounty airdrop* - you receive rewards for completing tasks that are easy but can take a fair amount of time and are of value to the project. Many new projects are choosing this method of token airdrops.
- *Holder airdrop* - you can receive crypto coins or tokens if you hold a certain number of tokens of another cryptocurrency in your wallet.
- *Exclusive airdrop* - given exclusively to people who have an established history with a particular website, project, or community.
- *Hard Fork airdrop* - when a coin has a hard fork from the original coin, holders of the original coin will receive an equal amount of the new tokens in their wallets.

A Word of Caution

While free tokens are always nice, you want to be careful if you are going to get involved in airdrops. Holding and interacting with a bad token in your wallet can give unwanted access to your wallet. To be on the safe side, I suggest a few steps to take if you plan on participating in airdrops including using a browser dedicated to just airdrops such as setting up a new email account with a unique password just for airdrops and setting up a new MetaMask wallet on the browser used on for holding airdrop coins.

Please see Appendix G for a list of various sites specializing in airdrops.

Chapter Fourteen - BOTZ

After writing the rough draft of this book, I sent out a number of copies asking for feedback. I targeted two main groups, those with cryptocurrency experience and those without. One common theme was that they understood the strategies and basic concepts presented, but the execution part seemed too hard. This got me thinking, and to every problem lies an opportunity.

Crypto Trading Bots

After getting introduced to crypto through mining, I became obsessed with generating passive income. Before yield farming, I was receiving passive income through mining. Over time, the costs associated with mining became higher as energy prices rose and a crypto bear market crushed profits. The Ethereum merge also moved that coin from proof-of-work, which required miners, to proof of stake which did not. This was a death blow to mining for me.

Switching up my focus, I discovered the world of crypto trading bots and this became a new obsession of mine. I programmed both free and open source code trading bots and soon had a number of these up and running trading Bitcoin, Ethereum and MATIC.

BOTZ

BOTZ was born as a solution to the problem pointed out by the readers of the initial versions of this book. At first the idea was to use the simplicity of NFTs to harness the complex power of trading bots. My initial plan was to offer NFTs and put the capital made into trading bots. I would then pay out a significant portion of the profits back to the NFT holders. My team and I launched a beta version and we will continue to work on this area as we improve the overall performance of our underlying bots.

The second BOTZ NFT project revolves around yield farming. Using the ideas and strategies presented in this book, BOTZ would offer NFTs for which the capital raised from NFT sales would be placed into yield farms to generate passive income for our NFT holders. This allows investors to capitalize on yield farming without having to do all the work.

BOTZ mints and sells NFTs on the Polygon network. While I'm a huge fan of the BNB Chain, the Polygon network offers much cheaper gas fees and given the large number of transactions we are doing in all of our products. We wanted to ensure that almost all of the capital invested is working all of the time and not being used to pay for all the activity within the project so we settled on using the Polygon network.

YieldBotz

YieldBotz are NFTs sold on OpenSea, the world's largest NFT marketplace. OpenSea allows for NFT minting and transactions in both Ethereum, which is very expensive, and Polygon. Each YieldBotz NFT costs 250 USD Coin (USDC) on the Polygon network. Because USDC is a stablecoin, there is very little variation in NFT prices which hover around $250.

BOTZ takes the revenue generated from our NFT sales and places them into yield farms that meet our very specific criteria. This includes:

- Total Value Locked (TVL)
- Length of project (six months minimum)
- Doxed founders
- Size and loyalty of community
- Risk levels and impermanent loss risk
- Return on investment

YieldBotz target's a return of roughly 50% APY to investors and automatically sends each NFT holder's share of profits to their wallet in USDC on the first of each month after holding the NFT for one full calendar month. BOTZ takes 15% of the profits as a service charge and to cover all the costs associated with the project.

Each YieldBotz NFT includes a unique robot making them each one of a kind. The roadmap for YieldBOTZ NFTs includes four “phazes”:

- Phaze One = 1,000 NFTs
- Phaze Two = 2,000 NFTs
- Phaze Three = 3,000 NFTs
- Phaze Four = 4,000 NFTs

Investors will be able to use their USDC monthly income to “compound” by purchasing additional NFTs for 250 USDC each if they choose. Over time, this compounding effect will create a bigger passive income stream given the multiplying effect of holding multiple NFTs. For example, someone holding three YieldBotz NFTs will receive three times the income each month versus just holding a single NFT.

BOTZ Final Thoughts

BOTZ combines my passion for NFTs with my passion for yield farming, in addition to cryptocurrency bot trading. Launched in November of 2022, the goal was to create NFTs with real utility - passive income streams.

It is also my hope that BOTZ NFTs help investors get started into the journeys, especially for those new to yield farming which can be quite complex and confusing. Each YieldBotz holder is also offered a copy of this book so that they are not only earning income but also getting educated on yield farming at the same time.

As with any project, please make sure to do your own research. You can find more about BOTZ and the YieldBotz collection using the following links.

- Botz.Finance Website
- BOTZ FAQ
- BOTZ White Papers
- BOTZ Discord
- BOTZ Twitter
- BOTZ Instagram
- BOTZ YouTube
- BOTZ Facebook

You can also email us at botz@botz.finance with any questions you might have.

Conclusion

Thank you for reading each of my two e-books. I hope you learned a lot about yield farming and how I go about using various tomb forks in my strategy to build up my portfolio of preferred coins (Bitcoin, Ethereum and US Coin).

Please keep in mind that I am not a financial advisor and none of what you have read is specific financial advice outside of not sharing your wallets private keys. You are now equipped with a little more knowledge to begin doing your own research into crypto projects including yield farming. Your strategy is yours alone, based on your personal situation and risk tolerance levels.

My goal in writing these two books was to provide a clear and concise overview of yield farming, present the strategy I use so you can think very strategically about how you want to approach this space, and then provide a walkthrough of the process from start to finish. I wish all this information was in one place when I got started and I hope you find it extremely valuable.

The strategies presented in book two are based on my own personal financial situation, high risk tolerance, and on the current crypto market and financial market overall at the given moment. It is also based on the platforms available at the time of the writing of this book.

This is just the start, once you have your first farm up and running you will really want to understand that platform's ecosystem well so you know how to move your tokens around to minimize risk and maximize returns. I built up my EMP Money to a point in which I could reinvest about half the profits to keep it growing while taking the other half and begin diversifying into other platforms. Your own personal strategy should begin to emerge as you gain knowledge about this area of crypto and it should be constantly evolving as your knowledge base grows.

The point is to have a well-thought out strategy at first as it will keep you focused and away from projects that may sound appealing on the surface, but don't really fit into what you are doing. Those types of projects rarely turn out too well. I've learned this from personal experience, but the price paid in investment loss was well worth the lessons gained.

Crypto can be complicated and certainly what I have shared with you is considered quite complicated even within crypto circles.As such, I wanted to share additional support to you if needed. Feel free to email me at cryptomasterminer@gmail.com with any questions you might have or to set up a time to speak on the phone and guide you through some of the steps.

Good luck on your journey!

Appendix A - Whiteboard Crypto Videos Links

Part One Chapter Video Companions

Chapter 1 - What is Yield Farming - https://youtu.be/LaeI5D6NDvw

Chapter 2 - Decentralized Finance - https://youtu.be/17QRFlml4pA

Chapter 3 - Automated Money Maker - https://youtu.be/1PbZMudPP5E

Chapter 4 - Liquidity Pool - https://youtu.be/1PbZMudPP5E

Chapter 5 - Smart Contracts - https://youtu.be/pyaIppMhuic

Chapter 6 - APR vs APY *(video by CoinGecko)* - https://youtu.be/rNDjgnDJd9A

Chapter 7 - Gas Fees and Slippage - https://youtu.be/3ehaSqwUZ0s

Chapter 8 - Impermanent Loss - https://youtu.be/_m6Mowq3Ptk

Chapter 9 - Rug Pull - https://youtu.be/YFaqng3YESE

Whiteboard Crypto Videos on Specific Yield Farming Platforms

AAVE - https://youtu.be/dTCwssZ116A

Curve Finance - https://youtu.be/MqRfurKVM1A

Sushiswap - https://youtu.be/NTYbVnENeVo

Uniswap - https://youtu.be/DLu35slqVTM

Appendix B - Helpful Yield Farming Resources

Chainlist - https://chainlist.org/ - an easy way to add networks to your MetaMask wallet

Coindix - https://coindix.com/ - monitors 10,000+ vaults on multiple chains

Coingecko - https://www.coingecko.com/en/categories/yield-farming - yield farms list

Coin Sniper - https://coinsniper.net/ - source for best new cryptocurrency projects

Dex Screener - https://dexscreener.com/ - real time price charts and DEX trading history

Genesis Pool - https://www.gpool.app/ - decentralized cross-chain project launchpad

Vfat Tools - - https://vfat.tools/ - a suite of calculators for yield farming

DefiLlama - - https://defillama.com/home - DeFi TVL rankings and more

DeBank - https://debank.com/ - multichain portfolio tracker

DeFi Prime - https://defiprime.com/ - media outlet and DeFi analytical services provider

DeFi Pulse - https://defipulse.com/ - DeFi listing and blog

LoanScan - http://loanscan.io/ - compare high interest sites

Appendix C - Helpful DeFi News Sites and Newsletters

News Sites

CoinDesk - https://www.coindesk.com/

CoinTelegraph - https://cointelegraph.com/

Decrypt - https://decrypt.co/

Crypto Briefing - https://cryptobriefing.com/

The Block - https://www.theblockcrypto.com/

Newsletters

Bankless - https://bankless.substack.com/

My Two Gwei - https://mytwogwei.substack.com/

The Defiant - https://thedefiant.substack.com/

DeFi Tutorials - https://defitutorials.substack.com/

DeFi Weekly - https://defiweekly.substack.com/

Dose of DeFi - https://doseofdefi.substack.com/

Ethhub - https://ethhub.substack.com/

Appendix D - EMP Money Loops

- Farms produces ESHARES
- Boardroom (takes ESHARES tokens) produces EMP
- Nodes (takes EMP tokens) produces EMP
- Detonator, swap ESHARES into ETH and combine with EMP (compound daily)
- Reactor, swap ESHARES into BNB and combine with ESHARES (compound daily)
- Autovaults can take rewards from Detonator or Reactor to create more LP tokens

Your EMP Money loop can be built to fit your goals. Rewards can always be used in other parts of the platform. You want to stay away from selling the EMP tokens which would hurt the ecosystem by putting downward pressure on the price, however ESHARE tokens can be swapped for other tokens or sold for profits.

The Detonator requires EMP-ETH LP tokens and rewards are given back in the same tokens (EMP-ETH LP tokens). The Reactor requires ESHARE-BNB LP tokens and rewards in the same tokens. Each feature is essentially a money loop within itself as you compound daily to grow the deposit amount and increase future rewards and the total amount you will be able to get out of the system. You can also claim the rewards and place them into the farms or into an autovault using the same LP tokens.

My personal goal with the EMP Money ecosystem is to ultimately build up the EMP-ETH LP tokens because I believe Ethereum (ETH) is a good long-term investment. Remember ETH is one of my three main coins to focus on. As such, most of my focus is on the EMP-ETH farm and the Detonator which also uses the EMP-ETH LP tokens. When taking profits, I can use PancakeSwap to split the LP token back into the EMP token and Ethereum when the price of ETH is high.

As you tinker with the ecosystem, your knowledge will grow as will your confidence.

Appendix E - Crypto Bridges

Binance Bridge - https://www.bnbchain.world/en/bridge

Avalanche Bridge - https://bridge.avax.network/

Multichain - https://multichain.org

Synapse Protocol - https://synapseprotocol.com/

Celer cBridge - https://cbridge.celer.network

Umbria Narni Bridge - https://bridge.umbria.network

Rango Exchange - https://app.rango.exchange/swap/

Wormhole - https://portalbridge.com/#/transfer

Appendix F - Top Crypto Launchpads

Binance Launchpad - https://launchpad.binance.com/

Ethereum Launchpad - https://launchpad.ethereum.org/

BSCPad - https://bscpad.com/

KuCoin Spotlight - https://www.kucoin.com/spotlight-center

DAO Maker - https://daomaker.com/

Polkastarter - https://polkastarter.com/

TrustSwap - https://trustswap.com/

Gate.io - https://www.gate.io/

BoostX - https://www.boostx.finance/

Gamefi - https://gamefi.org/

Solster Finance - https://solster.finance/

Appendix G - Airdrop Sites

Coinmarketcap - https://coinmarketcap.com/airdrop/

Airdrops.io - https://airdrops.io/

Airdrop Alert - https://airdropalert.com/

Airdrop King - https://airdropking.io/en/

Airdrop Addict - https://airdropaddict.com/

Airdrop Bob - https://www.airdropbob.com/

Coin Airdrops - https://coinairdrops.com/

99airdrops.com - https://99airdrops.com/

About the Author

Yield Farming author Paul Donaghy is a cryptocurrency enthusiast. His self proclaimed title is DeFi Yield Farmer, Liquidity Provider, Crypto Lender, Bitcoin Miner, Investor, Writer, Blogger, Teacher and NFT Artist. He lives in the Dallas area with his wife and two sons along with their dog Kuda who now has his own cryptocurrency - Kuda token (KUDA) on the BNB Chain.

Born in Birmingham England, Paul moved to the United States at an early age and his family settled in the Detroit area of Michigan. The oldest of three boys, Paul was the first in his family to attend college receiving his bachelor's degree in Marketing from Michigan State University. While working his first "real" job, he would go on to earn an MBA from Wayne State University at night.

After working for five years in Detroit, Paul would move to Dallas where he would go on to become a successful businessman and entrepreneur. He would quickly ascend to Vice President and Regional Director roles for creative and technology companies being responsible for thousands of employees and hundreds of millions of dollars in revenue.

With a passion for sports, specifically soccer, Paul would take his business talents into various roles in the sports industry including serving as the Director of Marketing for a professional soccer club and working as the General Manager for soccer clubs that won national titles at their respective levels. He also owned an indoor soccer facility in addition to founding and acting as the Coaching Director for a successful youth soccer club in the Dallas area.

Always having a strong interest in finance and with successful investments in the stock market, Paul discovered the world of cryptocurrency by accident. Taking an old laptop computer, he figured out how to mine cryptocurrency for fun and soon he was off on a journey he never expected to take. He would become consumed with cryptocurrency, purchasing his first Bitcoin and Ethereum coins before diving headfirst into the world of DeFi where he fell in love with yield farming along with other projects on blockchains.

Paul is an avid crypto blogger and NFT artist. You can find much of his work under his "cryptomasterminer" account name on his preferred platforms.

Articles - Publish0x - https://www.publish0x.com/@CryptoMasterMiner
NFTs - OpenSea - https://opensea.io/CyptoMasterMiner

Paul can be reached at cryptomasterminer@gmail.com

Get a Free NFT for Leaving an Amazon Review

If you leave a review of the book on Amazon and email me your wallet address I will send you a free NFT on OpenSea minted on the Polygon network.

Thank you for reading Yield Farming!