STABLECOIN
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StableCoin Introduction

Now we have an understanding of the Defi Building Blocks, let us take a closer look at the StableCoin. In this section we go through the most prominent concepts. Chapter 1 What is Stable coin. This serves as the basis for Chapter 2, which explains why do we need stablecoin. Chapter 3 explains Different Type of stablecoin. Chapter 4 explains How does stablecoin works.
What is a StableCoin

What is stablecoin?

Stablecoin

- **Real World Collateralized**
- **Crypto Collateralized**
- **Algorithmic**

The basic definition of this type of cryptocurrency is that it is a digital currency that is price stable. You will find that many of the typical cryptocurrencies with which people are familiar, such as Bitcoin, Litecoin, and Ethereum, there is a substantial amount of volatility. The prices of the coins are not stable at all, and they can increase or decrease drastically. While this means that there tends to be a large risk/reward with these currencies, it is not a risk that everyone is going to want to take.

At its core, a stablecoin is a cryptocurrency or a crypto token that matches the value of a real-world asset. In many cases, it’s an asset that has a predictable value and purchasing power. The most basic purpose of a stablecoin is to maintain price stability in relation to another cryptocurrency such as Bitcoin, Ethereum or Litecoin. Stablecoin attempts to achieve price stability by being pegged to a reserve asset such as the US dollar, gold or any other foreign currency. Stablecoins thus offer the stability of the regular currency and the privacy and security of cryptocurrency transactions.

When you look at the concept of a stablecoin, you can quickly see why they are so important. These coins are essential because they are going to have the potential to create more stability, as the name would suggest. No longer do people have to worry about the daily fluctuations of their cryptocurrency when deciding to make a purchase. In the short-term, stability allows for people to transact in a practical way, and the long-term stability enables other important financial functions such as loans and credit.
What is a StableCoin

Many in the field believe that these types of coins are going to become more important than Bitcoin and other common cryptocurrencies that suffer from the problematic volatility that pushes away potential investors.
Why do we need Stablecoin

No longer do people have to worry about the daily fluctuations of their cryptocurrency when deciding to make a purchase. In the short-term, stability allows for people to transact in a practical way, and the long-term stability enables other important financial functions such as loans and credit.

Stablecoins bridge existing financial markets and crypto-related ones by using the same reference pricing. Users are able to stay in the “digital sphere” while allowing for real-world assets to come online.

A digital token with price stability gives investors the opportunity to interact with the digital ecosystem while avoiding the middlemen’s costly conversions between fiat and crypto. The investment experience can remain entirely digital.

Fiat currencies’ inherent benefit also applies to stablecoins: the stability of the US Dollar or another asset/currency to which it is linked. Countries with weaker or volatile fiat currencies could utilize stablecoins similar to embracing the USD to manage risk and participate in global monetary systems.

Cryptocurrencies’ inherent benefit applies to stablecoins: fast and trustless settlement, frictionless transfer, and use of blockchain technology.

![Volatility Chart]

**Volatility**

- **Ripple**
- **Stablecoin**
- **Litecoin**
- **Tron**

**Time**
Different Types of StableCoin

There are Two Major Category of Stablecoins
1. Collateralized Stablecoins
2. Non-collateralized (seigniorage) Stablecoins

There are Three Major Category for Collateralized Stablecoins
- Fiat-collateralized (Centralized)
- Asset-collateralized (Centralized)
- Crypto-collateralized (Decentralized)

Collateralized Stablecoins

Fiat-collateralized (Centralized)

Fiat-collateralized, or fiat-backed, stablecoins store their value in fiat currencies such as the US dollar or Euro. If you want to build a stablecoin, it’s best to start with the obvious. Just create a cryptocurrency that’s literally an IOU, redeemable for $1. You deposit dollars into a bank account and issue stablecoins 1:1 against those dollars. When a user wants to liquidate their stablecoins back into USD, you destroy their stablecoins and wire them the USD. This asset should definitely trade at $1 — it is less a peg than just a digital representation of a dollar.
Different Types of StableCoin

The biggest risk to this stablecoin model is counterparty risk. These stablecoins require trust in a centralized entity, such as a bank. The fiat-collateralized stablecoin model becomes dangerous when there is a lack of trust in the central party’s ability to cover IOUs issued. These issues can be resolved if assets are auditable and there is sufficient data to show that the centralized entity has enough assets to cover outstanding IOUs.

Pros:

• 100% price-stable
• Simplest (a big virtue!)
• Less vulnerable to hacks, since no collateral is held on the blockchain

Cons:

• Centralized — need a trusted custodian to store the fiat (otherwise vulnerable to brick and mortar theft)
• Expensive and slow liquidation into fiat
• Highly regulated
• Need regular audits to ensure transparency
Different Types of StableCoin

Asset-collateralized (Centralized)

The structure of asset-backed stablecoins is similar to fiat-backed, however, the digital coin is pegged to the value of a hard asset instead of a fiat currency.

For example, Digix offers a token, DGX, where one token is equal to one gram of gold. This gold is stored in a vault in Singapore and is audited quarterly to ensure the gold reserves correlate to the total market cap of the token.

The risks associated with asset-backed stablecoins are similar to the risks of fiat-backed stablecoins in that third parties must be trusted with audits to ensure the peg ratio holds true.
Different Types of StableCoin

Crypto-collateralized (Decentralized)

Collateralized stablecoins operate in the same way as fiat-backed stablecoins. The only difference is that they are backed with reserves of another cryptocurrency as opposed to the fiat currency.

Crypto-collateralized stablecoins are backed by digital assets on-chain. This type of stablecoin is collateralized with other cryptoassets, such as Ethereum or another token.
Different Types of StableCoin

Crypto-collateralized (Decentralized)

Collateral is held in a smart contract and accessible only by clearing the stablecoin debt and such stablecoins are “over-collateralized”. This means that a big portion of the issued supply is maintained as a reserve in order to distribute a lower number of stablecoins, which in turn allows the issuers to maintain price stability.

The main advantage of crypto-collateralized stablecoins is that the entire ecosystem can live on the blockchain.

The second advantage of collateralized stablecoins is that they are fully decentralized. This means they can benefit from the inherent virtues of the blockchain. They can also be liquidated very fast and at a reduced cost. The entire ecosystem is transparent because all transactions are stored publicly.

The biggest risk to this stablecoin model is the volatility of the underlying collateral. If the collateral loses too much value, the system become under-collateralized and fallback procedures could be enabled, such as stablecoin liquidation.
Different Types of StableCoin

Non-collateralized (seigniorage) Stablecoins

Algorithmic

- Algorithmic stablecoins are not backed by a hard asset, but instead automated logic modifies the token supply based on supply and demand. Think of this as an automated central bank that enacts monetary policy through programmatic capital controls.
- This stablecoin uses algorithmic mechanisms to retain price stability and are not backed by any assets.
- User adoption is one risk faced by algorithmic stablecoins, like Basis, since the functionality of the system required participation for stability.
- Their complex designs usually involve an opportunity to earn some type of “dividend” (shares) for its holders, called seignorage shares. They are not tied to any other crypto or fiat currency, but they are also the most vulnerable to market crashes.

Stable Coins Example

![Stable Coins Diagram](image-url)
How to create a Stablecoin?

1. Identify the type of stablecoin to be developed

To identify the type of stablecoins you require, ask yourself the following questions:

- How much liquidity do I need from my stablecoins?
- What kind of decentralization/independence do I require?
- How many audits can I afford to increase trust and reduce risk in my stablecoins?
- How simple or complex do I want the whole architecture to be?

2. Identify the platform and technologies required to build stablecoin

Once you narrow down to the type of stablecoin you need to develop, it is the time to select the platform to create a particular stablecoin. Initially, Ethereum was the only platform for building stablecoins, but it no longer the same case. There were around 11 stablecoins in the market in 2016, while 10 more were added in 2017. But today, there are more than 70 stablecoins and 140 are in development. With the pros and cons of all the available platforms, you can make an informed decision on the platform you want to work on.

3. Think about the maintenance of liquidity

If the liquidity is lost, the entire concept of building a stablecoin might go wasted. We recommend the following steps to ensure utmost liquidity:

Evaluating inflation and value

It is essential to integrate an automated monitoring system to offer daily currency rates and index rates from the Consumer Price Index and Personal Consumption Expenditures.

Transaction Fees

Revenues from transaction fees should be split, with some part going to the stablecoin partner while the remaining goes into the liquidity reserve to improve the liquidity.

Protecting from high supply

Users who want to redeem or sell their stablecoins should be able to do so at current face value minus transaction fees. It removes any incentive for sellers to market their stablecoins at discounted rates on secondary markets.
4. Create visual and technical designs of the system

Now, it is time to go ahead and design your required token. Designing a stablecoin means understanding the flow of transactions of a stablecoin and how the entire system will work. Also, in this step, you may need a system design that will help your users interact with your token. For instance, you may require a website or a mobile app to enable interaction with a stablecoin. Therefore, this step requires designing screens for web/mobile apps.

5. Development, Integration of Blockchain Platform and Launching to Mainnet

Once the designs are ready, the next step is to develop the system. In the development stage, you write smart contracts required to interact with a stablecoin and launch nodes on the blockchain platform that you are using. When features of the stablecoin are developed and are connected to the blockchain backend, the next step is to launch it on the test net. If you are developing a stablecoin using the Ethereum platform, you will find various tests net in the market. Ask different groups of people to check the quality of your developed product on the test net and provide feedback for improvement. Fix issues that might have arisen during the testing phase. Once all the issues are fixed, you can launch the stablecoin on the mainnet.
How does it Work?

When traders want to minimize risk they can choose to trade volatile cryptocurrencies (like Bitcoin or Ethereum) for stablecoins. Each stablecoin is fully backed by a valuable asset held in a secure smart contract platform. In our case, anyone can lock their tokens up as collateral and issue KRWD against them.

Everyday users should not need to understand the internal mechanics in order to use a stablecoin. People can freely use it as a traditional currency because price stability is managed through an autonomous system of smart contracts specifically designed to respond to market forces and an ecosystem of economic incentives.

As an example, anyone can open a Collateralized Debt Position (CDP) on the Ducato platform. This CDP is a smart contract which gives users KRWD in exchange for locking up valuable collateral. The assets are held in escrow until the borrowed KRWD is returned by the user. Put another way, KRWD is created when users lock up collateral and KRWD is removed from circulation when users free up their collateralized assets.
Limitation and Application of Stablecoin

**APPLIED AND LIMITATIONS OF STABLECOINS**

**AFFORDABLE AND EXTREMELY FAST REMITTANCES**
Sending remittances overseas is much simpler with these coins. They are extremely fast and will have the same value as fiat money.

**P2P PAYMENTS AND STREAMLINING RECURRING**
Making peer-to-peer payments is easier with stablecoins. You can use them on smart contracts to make automated payments.

**ADDED LEVEL OF SECURITY FROM CURRENCY CRASHES**
As they are stable, you won’t have to worry about currency crashes while investing. Unlike other cryptocurrencies, the values almost don’t have any fluctuation.

**EVERYDAY CURRENCY**
You can use stablecoins as an everyday currency just like fiat money with legal backups. They will be just like digital money, and you can use them to make online payments.

**MORE STABLE CRYPTO CURRENCY EXCHANGES**
Stabilizing the market, these coins can improve the overall nature of the cryptocurrency exchanges. No added risk, no unnecessary regulations.

**WHAT ARE THE REAL WORLD APPLICATIONS?**

**CENTRALIZED**
Stablecoins have a centralized nature, which goes against the primary nature of blockchain.

**TRUST ISSUES**
As they have centralized nature, people can’t fully trust the system. They still need to prove their applications.

**REGULATIONS**
Most of the coins have the same regulations as the fiat money. So, this ultimately clashes with the purpose of cryptocurrencies.

**UNSTABLE**
Crypto backed, or commodity backed stablecoins could become unstable due to crashes in pricing. It’s still unclear how they will back up if the values of assets drop in the real world.

*Research by Delio LABS*
Usecases of Stablecoin

USE CASES FOR STABLECOINS

- Safe Haven Asset
- Settlement
- Trading
- Escrow
- Payments
- Lending
- Remittance
- Alternative Banking
- Payroll
- Powering Decentralized Applications

TOP 5 BENEFITS OF STABLECOINS

- Faster Speed
- Lower Fees
- Borderless
- Transparent
- Programmable
Conclusion

The purpose of stablecoins is a lot bigger than enabling financial contracts or being a transparent & semi-stable way for traders to trade. It is the evolution of money.

It is the new money that will be controlled algorithmically, in the absence of any political stimulus. It would simply serve the use of being an advanced medium of transaction and as a unit of account that we have in human history.

It is imperative that we prepare for the limitations of stablecoins and get it right. Standing on the same parallel grounds as the idea of John Nash’s ideal money, stablecoin has what it takes to become a global money standard – one that is similar to the standard measure, like the metric system. It has given us a way to develop a decentralized currency which promotes price stability.

Stablecoins can be the icebreaker for cryptocurrency real-world adoption. Once understand how stablecoins work and how they can help businesses to pay someone a salary in StableCoin, you begin to see their value.