

CRYPTOCURRENCY INSURANCE

1. Concept of Cryptocurrency

With the development of technology, economic assets have also entered the process of digitalization, thus the concept of "digital money" has emerged. Digital money is defined by the European Central Bank as *"assets that are issued and controlled by its developers, and approved within a certain virtual environment without any regulations"*.¹ Cryptocurrencies, which appeared in our lives for the first time in 2008, are digital assets created using cryptography and produced in a decentralized cryptosystem. All sorts of transactions related to cryptocurrencies are made through "blockchain" technology.

As a result of the fact that more and more people prefer cryptocurrency as an alternative currency; cryptocurrency and blockchain technology have taken their place in many sectors, and this rapid growth has constituted new needs in this market.

Currently, one of the most important needs of the cryptocurrency market is undoubtedly the security of cryptocurrencies.

2. Overview of Cryptocurrency Insurance

Insurance is the right of demand of those people who are exposed to the same or similar risks to cover the economic losses that will arise in the event of the realization of the risk, in return for a certain price (premium)². In this context, cryptocurrency insurance can be defined as "the protection of cryptocurrency investors or businesses within the union against unforeseen risks in exchange for a fixed premium". The protection mentioned here is in many ways similar to the concept of insurance in other insurance fields.

¹ [European Central Bank. \(2012\). Virtual Currency Schemes. Germany.](#)

² Prof Dr. Emine Yazıcıoğlu, Prof Dr. Zehra Şeker Öğüz, "Sigorta Hukuku" 3. Baskı s.1

Although the claim rights of the insured and the assurance provided to the insured in car insurance, health insurance and life insurance are also provided in the same scope in cryptocurrency insurers; since the cryptocurrency sector, which is a unique field, contains more risks that can be realized in the electronic environment, are under more comprehensive protection on electronic risks.

3. The Evolution of Cryptocurrency Insurance

The fact that cryptocurrencies have become very valuable digital assets in a short time has resulted in an increase in cases such as theft and fraud on crypto assets, so the protection provided by exchange platforms and crypto wallets to crypto assets has been insufficient. Therefore, more comprehensive protection of crypto assets has become a priority requirement for investors and crypto-related companies. The insurance sector did not remain indifferent to this need of investors and businesses and finally took its place in the new field of "Cryptocurrency Insurance" in 2019.

Cryptocurrency insurance, which is initially launched by an insurance company based in the UK, with flexible limits as low as £1,000 to protect against losses from theft of cryptocurrencies held online / in hot wallets; has managed to attract the attention of many investors, companies and cryptocurrency exchanges, hence, it has become the focal point of the industry in a very limited time.³

Cryptocurrency insurance as a still emerging insurance industry provides protection for over 4% of the cryptocurrency market of the world today.

4. The Importance of Cryptocurrency Insurance

According to a new report from blockchain analytics firm Chainalysis, the amount of cryptocurrency losses due to theft, hacking and fraud amounted to \$1.9 billion by the end of

³ [Lloyd's, Coincove](#)

July 2022.⁴ These quite high losses have caused distrust against cryptocurrency businesses, especially by investors. As a solution to this situation, the protection provided by cryptocurrency insurance took its place in the sector and gave composure to investors. Thus it increased the reliability of the cryptocurrency sector. The security system which has been built by insurance has provided investors the ability to invest freely, without concern of any attack or omission that will wipe out all their investments suddenly.

Cryptocurrency insurance also provides protection to cryptocurrency businesses for their crypto assets and customers. Thus, cryptocurrency companies can maintain their existence without any legal and economic threat, and the reliability of the sector is ensured.

5. Ingredients of Cryptocurrency Insurance

5.1. Risk:

Insurance Law defines risk as a situation that is uncertain whether it will occur or not, as well as the time of realization, but when it occurs, it creates a loss or other economic needs⁵.

In the cryptocurrency insurance field, risk can be expressed as the loss of crypto assets as a result of various cyber crimes, such as fraud, theft and cyber attacks, or disruptions in network security, privacy controls, and data breaches as well.

It is extremely important that identify the extent of risk insured from cryptocurrency insurance. Since there are uncountable risks that may cause the insured to incur losses, it is not possible to ensure all the risks that the insured is exposed to.

⁴[Mid-year Crypto Crime Update: Illicit Activity Falls With Rest of Market, With Some Notable Exceptions](#)

⁵ Prof Dr. Emine Yazıcıoğlu, Prof Dr. Zehra Şeker Öğüz, “Sigorta Hukuku” 3. Baskı s.74

Besides, in insurance law, it is important to limit the risk determined by type to a certain period of time. Risks before the beginning and after the end of this period determined in cryptocurrency insurance will not be covered.

5.2. Danger Association

It is defined as a community formed by individuals who may be exposed to the same or similar risk. In cryptocurrency insurance: investors, crypto issuers, crypto wallet providers, exchanges, e-commerce sites that accept and store cryptocurrencies as payment methods, ICOs, miners and any businesses that provide services related to crypto assets are in danger of association.

Crypto insurance policies that exist today are mostly preferred by exchanges and crypto wallets.

5.3. Insurance Assurance

Insurance assurance means meeting the economic need that arises as a result of the realization of the risk. In cryptocurrency insurance, the insurer will provide this assurance by committing to cover the cryptocurrency losses that the insured may suffer.

While cryptocurrency insurance provides protection against cryptocurrency losses it does not cover losses related to market fluctuations and price changes.

Within the scope of the protection provided by cryptocurrency insurance, insurance companies may provide the following services:

5.3.1. Criminal Liability Insurance

Criminal liability insurance provides protection against crimes related to property such as theft, embezzlement, fraud, and forgery. This insurance protection was on the radar of thieves and fraudsters especially in recent years with the increase in popularity of cryptocurrency, hence it has become one of the

biggest requirements in terms of cryptocurrencies.

This policy covers the direct loss of crypto assets through a crime such as a misuse, theft, hacking, and cyber fraud of crypto assets.

In this context, the insured can claim damages arising from a crime against cryptocurrencies from the insurer.⁶

5.3.2. Cyber Insurance

Every company faces cyber risk. However, the cryptocurrency sector is at a more risky point compared to other sectors due to its nature.

The cyber insurance policy provides protection against cyber security risks such as hacking, malware, data or cyber breaches, as well as all direct/indirect economic risks that may arise from network security or privacy disruptions that are not caused by cybercrime.

Within the scope of this policy, the insured will be able to claim from the insurer for research services, business interruption and all other damages incurred due to data recovery. In addition, the insured will be able to claim damages from the insurance company regarding the customers or partners affected by a cyber attack against the business.

5.3.3. Directors & Officers Insurance for Cryptocurrency:

D&O (Directors & Officers) insurance, as sole liability insurance, provides financial protection to managers and officers who cause damage to third parties while continuing their management activities, by meeting the compensation claims.⁷

In this context, the D&O policy covers the losses incurred by the directors and officers of

the businesses providing services related to cryptocurrency due to breach of duty.

Within the scope of this policy, the insured can claim all the damages that have suffered, including the court costs from the insurer.

5.3.4. Errors & Omissions Insurance for Cryptocurrency:

This policy covers all liabilities of businesses against customers who lost their crypto assets due to negligence, error, misrepresentation, violation of goodwill and fairness, wrong advice and inadequate work in the services provided.

In this context, the Insured can claim from the insurance company many loss items, including but not limited to attorney's fees and litigation expenses.

5.3.5. Decentralized Finance (DeFi) Insurance for Cryptocurrency

Decentralized Finance (DeFi) Insurance for crypto assets is also known as smart contract insurance since it covers disruptions that may arise from smart contracts.

Under the DeFi insurance policy for cryptocurrency, the Insured can claim all their losses due to smart contract failure. Thus, this policy assures the insured that the software of the cryptocurrency is unhackable and that trading and all other transactions are carried out in accordance with the terms of the smart contract.

5.3.6. Custody Insurance for Cryptocurrency

Cryptocurrencies are stored in a crypto wallet, exchanges or online platforms. Storage Insurance provides assurance to the user if access to these platforms cannot be achieved for various reasons.

It is estimated that around 20% of current Bitcoin is lost or stuck in wallets with unknown passwords. As of May 2021,

⁶HCP National "Cryptocurrency Insurance for Businesses"

⁷ KERVANKIRAN, s. 251; TENEV, STOYAN/ZHANG, CHUNLIN with BREFORT, LOUP, Corporate Governance and Enterprise Reform in China-Building The Institutions of Modern Markets, World Bank and the International Finance Corporation WASHINGTON D.C. 2002, s. 139.; KUBİLAY, HURİYE, s. 548-549

investors' accumulated lost Bitcoin amounts to approximately \$185 billion⁸.

With crypto key storage, password recovery and emergency recovery services covered by the custody insurance policy, the business or investor will not lose access to cryptocurrency eternally.

5.4. Premiums

Insurance assurance is provided in return for a certain amount called "premium" to be paid by the insured. In crypto insurance, the insured also insures the losses related to crypto assets in return for the premium.

In cryptocurrency insurance, the premium is determined by the fundamental values of the cryptocurrency. In other words, even if the value of the crypto asset fluctuates throughout the policy period, the protection provided by the insurance will cover all assets.

However, securing crypto assets, whose value is more prone to volatility, will pose a greater risk to insurers, and this circumstance is resulting in higher premiums.

The scope of protection of the preferred insurance, the insurance company and the value of the crypto assets to be protected are the variables that play an important role in determining the premium.

When calculating insurance premiums, it's also important to know how much insurance coverage an exchange or custodian has, which insurers take out the policy, what their financial strength rating is, whether the insurance covers both hot and cold wallets and whether the insurance is provided in dollars.

As a result, since the risk is high in cryptocurrency insurance, insurance premiums are also quite high. However, the annual premiums foreseen for cryptocurrencies can be as high as 5 percent of the coverage limits.

5.5. Right of Claim of the Insured

Within the scope of insurance law, the insured has the right to claim from the insurer within the framework of the contract, in case of the realization of the risk.

In cryptocurrency insurance, the insured will be able to demand from the insurer to cover all losses incurred within the scope of the assurance supplied by the insurer, provided that it is limited to the risk mutually determined by the parties.

6. Platforms that Provide Insurance and the Scope of Their Protection

In application, not all of the insurances listed in Article 5.3 can be provided by a single insurance company yet. As an example of the protections provided by the cryptocurrency insurance company, the scope of protection offered by 4 different companies is given below:

- crypto wallet protection against theft/hacks,
- protection against loss of access to cryptocurrencies and smart contract disruptions,
- protection against leaks, hacking or access to crypto passwords by business employees,
- protection against cyber attacks, various technical glitches and losses due to currency outages

In conclusion, cryptocurrency insurance is still an open market for insurance companies, which has seen slow progress since 2019. In the coming years, it is expected that the protection provided by insurance companies will become more comprehensive, and more insurance companies will take their place in the sector.

⁸HCP National "Cryptocurrency Insurance for Businesses"