**Cryptocurrency Background Information**

* Cryptocurrency: digital or virtual form of currency protected by a cryptography to make it nearly impossible to counterfeit or double-spend.[3]
* One main feature of cryptocurrency is that it is not issued by a central authority, making this form of currency theoretically immune to government involvement.[3]
* It is an alternative form of payment using an encryption algorithm for it to serve as a currency and a virtual accounting system.[1]

**Usage and Functionality**

* The main appeal and functionality of cryptocurrency comes from blockchain technology which is a set of connected blocks of information on an online ledger (collection of financial accounts) [3]
* Every block must be verified before being confirmed by a network of individual nodes making it virtually impossible to forge transactions.[3]
* To use cryptocurrencies, you need a cryptocurrency wallet which can be software that is a cloud-based service or is stored on your computer or on your mobile device. [1]
* Cryptocurrencies are made by mining, a process in which computers solve complex puzzles to verify the authenticity of transactions on the network so owners of those computers can receive newly created cryptocurrency. [2]

**Types**

* Different cryptocurrencies have different types which also in turn have different purposes:
  + Utility tokens, such as XRP and ETH, fulfill distinct roles within their respective blockchain ecosystems
  + Tokens intended for transactions serve as a means of payment, with Bitcoin being the most recognized among them.
  + Governance tokens confer voting or other privileges within a blockchain network, as seen with Uniswap.
  + Platform tokens facilitate the operation of applications built on a blockchain, as illustrated by Solana.
  + Security tokens, such as MS Token, represent ownership of assets like tokenized stocks, such as the Millennium Sapphire. Acquisition of such tokens grants partial ownership of the asset [3]
* With many different kinds of cryptocurrencies, the market for investing is large and while some are successful, there are also some that are obscure and essentially worthless [2]

**Security**

* The issue of cryptocurrency as a financial security is a gray area. Security in finance is anything that represents a value and can be traded. [2]
* Regulators are trying to propose that cryptocurrencies should be regulated like stocks and bonds, but there has been pushback saying it does not apply to cryptocurrencies. [2]

**Pros**

* Removes the central bank from the equation, reducing factors such as inflation [2]
* Benefits underserved communities and serves as a strong foothold for those communities [2]
* Blockchain technologies allow for a decentralized process which can be more secure than traditional financial institutions. [2]
* Some cryptocurrencies allow their owner to earn passive income through staking which involves using your cryptocurrencies to help verify transactions on a blockchain protocol [2]
* Removes single points of failure since centralized systems are not relied on, so failure in one point would not compromise the system [3]
* Easier to transfer funds between parties without the need for third parties such as banks or credit cards [3]
* Can be used to generate returns with investments [3]
* Remittances, money sent from one party to another, are streamlined by converting fiat currency into cryptocurrency and then to the target fiat currency [3]

**Cons**

* Cryptocurrency projects face uncertainty due to limited testing and widespread adoption of blockchain technology [2]
* Long-term investors may not realize expected returns if the potential of cryptocurrency remains unrealized [2]
* Short-term investors face rapid price fluctuations, leading to both gains and losses. These fluctuations can undermine the utility of cryptocurrencies as payment systems [2]
* Additionally, the environmental impact of mining, regulatory uncertainty, and potential crackdowns by governments pose further risks to the cryptocurrency market [2]
* Cryptocurrencies, often touted as anonymous, are actually pseudonymous, leaving digital traces that agencies like the FBI can trace, enabling tracking of financial transactions [3]
* Cryptocurrencies have become a preferred tool for criminal activities such as money laundering, illicit purchases, and ransomware attacks [3]
* Despite the concept of decentralization, ownership of cryptocurrencies is heavily concentrated, with a small number of addresses holding a significant portion of circulating bitcoins [3]

**Legality and Risks**

* User Risk: Cryptocurrency transactions are irreversible leading to potential loss if mistakes occur. Approximately one-fifth of all bitcoins are now inaccessible due to lost passwords or incorrect sending addresses, highlighting the risk of permanent loss [3]
* Regulatory Risks: The regulatory status of cryptocurrencies remains uncertain, with governments considering them as securities, currencies, or both. Sudden crackdowns could hinder the ability to sell cryptocurrencies or trigger widespread price drops [3]
* Counterparty Risks: Reliance on exchanges to store cryptocurrency exposes investors and merchants, potentially resulting in complete loss of investment [3]
* Management Risks: In the absence regulations, investors face vulnerabilities to unethical management practices, leading to losses for investors [3]
* Whether cryptocurrencies are legal depends on the regulations of each individual country [2]
* Unlike traditional currencies, cryptocurrencies are not required to be accepted as "legal tender" in most places. In the U.S., what can be purchased with cryptocurrency depends on the seller's preferences [2]
* Cryptocurrencies are taxed as property in the U.S., not as currency. Receiving cryptocurrency as payment or rewards also incurs tax based on the value at the time of receipt.[2]

Works Cited

[1] OSWEGO. (n.d.). The basics about cryptocurrency. The Basics about Cryptocurrency | CTS. https://www.oswego.edu/cts/basics-about-cryptocurrency

[2] Rosen, A. (n.d.). Cryptocurrency basics: Pros, cons and how it works. NerdWallet. https://www.nerdwallet.com/article/investing/cryptocurrency#:~:text=What%20is%20cryptocurrency%3F,a%20central%20government%20or%20bank.

[3] Team, T. I. (n.d.). Cryptocurrency explained with pros and cons for investment. Investopedia. https://www.investopedia.com/terms/c/cryptocurrency.asp