ECOSOC

Integration of international monetary parity into cryptocurrency

STUDY GUIDE

UNDER SECRETARY GENERAL
ANILCAN ÇELİKDEL

CO-CHAIR
IREM OZDEMIR

Letter From Secretary General

I feel more than honored to be welcoming you to first annual session of Rahmi Kula Anatolian High School Model United Nations . Organized under the framework of Model United Nations it is eager to reach a wide range of attendants from high schools which are deeply interested in diplomacy, international relations, politics, tourism, economy and the United Nations itself while constituting a unique experience of debating and socializing at the same time.
MUN sessions, which were held online with the pandemic, continue their adventure with the effect of the new normal moreover after a long time I share the excitement of the delegates with you.

During the three days of RKALMUN you will simulate all kinds of global issues, I am assured that the participants will observe fruitful debates, participate in reflective activities, and collaborate on marvellous resolutions. With its two General Assembly Committees and five further committees; Commission on the Status of Women (CSW), United Nations High Commissioner for Refugees(UNHCR), World Health Organization (WHO) United Nations Security Council (SC) and World Tourism Organization a UN Specialized Agency (UNWTO).

In the light of these aims, I would like to thank my dear deputies, Mr. Ada Surat and Mrs. İlayda Başaran. We worked hard with the organization team in order to make you #FeelTheMoment.
On behalf of our strong and hardworking Secretariat and Executive Team, I welcome all of you to RKALMUN Conference.

Heartily,

Secretary- General

Dilara Çetin

Letter From USG

Esteemed Delegates,

I, Anılcan Çelikdel as Under Secretary General of Economic and Social Council, I am welcoming you to RKALMUN and ECOSOC. Regardless of how many times you've participated in Model UN, I look forward to spending time with you.

Thank you for joining us.

I am pleased to announce the topic for this year contained in the study guide. In three days we will focus on cryptocurrencies.

This study guide is meant to be the starting point in your preparation for the conference. As you work to understand your country and your role, allow the study guide to set up the topic for you and get you thinking about the big picture.

Remember, you will be expected to know your stuff more often than not. However, the beauty of Model UN, is that you are not expected to know everything about your country, rural electrification, or microplastics. There is some opportunity to infer, interpret, and extrapolate what you already know and apply it to what you don't know.

A good start shall be to begin reading the present study guide as a stepping stone to expand your research.

I am looking forward to see you in RKALMUN.

Sincerely

USG of ECOSOC
Anılcan Çelikdel

Letter From Co-Chair

Distinguished Participants,

First of all i would like to welcome you all to the RkalMUN 2022. My name is Irem OZDEMIR. I am a 11th grade student in Sırrı Yırcalı Anatolian High School. It is my utmost honour to serve you as the Co-Chair of United Nations Economic and Social Council.

We expect each of you to contribute with innovative ideas, challenge each other in the spirit of true diplomacy and offer effective solutions. Our hope is that this study guide will help you gain a more profound insight into the topic and will serve as a compass for your preparation. Thorough research based on the outlines of the study guide and on your country's policy, solid knowledge of the Rules of Procedure, good negotiation skills and a fresh perspective are the tools that make for a great delegate.

As the Board of Ecosoc it is our role to assist you and answer any of your questions, so therefore please do not hesitate to contact us. We can't wait to meet you all in person and live with you a highly constructive experience!

Sincerely

Co-Chair of ECOSOC
İrem Özdemir

Introduction To The Committee

THE UNITED NATIONS ECONOMIC AND SOCIAL COUNCIL

ECOSOC is one of the six main organs of ***The United Nations,*** responsible of coordinating economic and social fields of the organization, specifically in regards to the fifteen specialised agencies, the eight functional commissions, and the five regional commissions under its jurisdiction.

ECOSOC serves as the central forum for discussing international economic and social issues, and formulating policy recommendations addressed to member states and the United Nations System. It has 54 members. In addition to a rotating membership of 54 UN member states, over 1,600 nongovernmental organizations have consultative status with the Council to participate in the work of the United Nations.

ECOSOC holds one four-week session each year in July, and since 1998 has also held an annual meeting in April with finance ministers heading key committees of the World Bank and the International Monetary Fund (IMF). Additionally, the High-Level Political Forum (HLPF), which reviews implementation of the 2030 Agenda for Sustainable Development, is convened under the auspices of the Council every July.

The Council consists of 54 Member States, which are elected yearly by the General Assembly for overlapping three year terms.

Prologue Of Main Topic

Integration of international monetary parity into cryptocurrency

What is Cryptocurrency?

Cryptocurrency is a digital payment system that doesn't rely on banks to verify transactions. It's a peer-to-peer system that can enable anyone anywhere to send and receive payments. Instead of being physical money carried around and exchanged in the real world, cryptocurrency payments exist purely as digital entries to an online database describing specific transactions. When you transfer cryptocurrency funds, the transactions are recorded in a public ledger. Cryptocurrency is stored in digital wallets.

Cryptocurrency received its name because it uses encryption to verify transactions. This means advanced coding is involved in storing and transmitting cryptocurrency data between wallets and to public ledgers. The aim of encryption is to provide security and safety.The first cryptocurrency was Bitcoin, which was founded in 2009 and remains the best known today. Much of the interest in cryptocurrencies is to trade for profit, with speculators at times driving prices skyward.

The main feature of cryptocurrencies is that they are decentralized. No physical space is needed to store cryptocurrencies. In this way, logistics and warehousing fees are reduced. Cryptocurrencies are protected by a protection system consisting of complex and difficult hash codes that only the owner knows. Since these hash codes are very difficult to crack, they are considered almost impossible.

Meeting the supply and demand of cryptocurrencies happens when some stock exchange companies bring together buyers and sellers. Stock exchange companies earn by taking commission from buying and selling. Also, some countries tax listed companies based on their annual volume and gain. You can see and review the highest volume stock market companies via this link;
https://coinmarketcap.com/tr/rankings/exchanges/

What are the features of crypto money?

According to Jan Lansky, a cryptocurrency is a system that meets six conditions:

i. The system does not require a central authority; its state is maintained through distributed consensus.

ii. The system keeps an overview of cryptocurrency units and their ownership.

iii. The system defines whether new cryptocurrency units can be created. If new cryptocurrency units can be created, the system defines the circumstances of their origin and how to determine the ownership of these new units.

iv. Ownership of cryptocurrency units can be proved exclusively cryptographically.

v. The system allows transactions to be performed in which ownership of the cryptographic units is changed. A transaction statement can only be issued by an entity proving the current ownership of these units.

vi. If two different instructions for changing the ownership of the same cryptographic units are simultaneously entered, the system performs at most one of them.

History of Crypto

In 1983, the American cryptographer David Chaum conceived an anonymous cryptographic electronic money called ecash. Later, in 1995, he implemented it through Digicash, an early form of cryptographic electronic payments which required user software in order to withdraw notes from a bank and designate specific encrypted keys before it can be sent to a recipient. This allowed the digital currency to be untraceable by the issuing bank, the government, or any third party.

In 1996, the National Security Agency published a paper entitled How to Make a Mint: the Cryptography of Anonymous Electronic Cash, describing a Cryptocurrency system, first publishing it in an MIT mailing list and later in 1997, in The American Law Review

In 1998, Wei Dai published a description of "b-money", characterized as an anonymous, distributed electronic cash system. Shortly thereafter, Nick Szabo described bit gold. Like bitcoin and other cryptocurrencies that would follow it, bit gold (not to be confused with the later gold-based exchange, BitGold) was described as an electronic currency system which required users to complete a proof of work function with solutions being cryptographically put together and published.

In 2009, the first decentralized cryptocurrency, bitcoin, was created by presumably pseudonymous developer Satoshi Nakamoto. It used SHA-256, a cryptographic hash function, in its proof-of-work scheme. In April 2011, Namecoin was created as an attempt at forming a decentralized DNS, which would make internet censorship very difficult. Soon after, in October 2011, Litecoin was released. It used scrypt as its hash function instead of SHA-256.

Another notable cryptocurrency, Peercoin, used a proof-of-work/proof-of-stake hybrid.

On 6 August 2014, the UK announced its Treasury had commissioned a study of cryptocurrencies, and what role, if any, they could play in the UK economy. The study was also to report on whether regulation should be considered. Its final report was published in 2018, and it issued a consultation on cryptoassets and stablecoins in January 2021.

In June 2021, El Salvador became the first country to accept Bitcoin as legal tender, after the Legislative Assembly had voted 62–22 to pass a bill submitted by President Nayib Bukele classifying the cryptocurrency as such.

In August 2021, Cuba followed with Resolution 215 to recognize and regulate cryptocurrencies such as bitcoin.

In September 2021, the government of China, the single largest market for cryptocurrency, declared all cryptocurrency transactions illegal, completing a crackdown on cryptocurrency that had previously banned the operation of intermediaries and miners within China.

Altcoin Consept

Tokens, cryptocurrencies, and other types of digital assets that are not bitcoin are collectively known as alternative cryptocurrencies, typically shortened to "altcoins" or "alt coins", or disparagingly known as "shitcoins". Paul Vigna of The Wall Street Journal also described altcoins as "alternative versions of bitcoin" given its role as the model protocol for altcoin designers. The term is commonly used to describe coins and tokens created after bitcoin.

Altcoins often have underlying differences with bitcoin. For example, Litecoin aims to process a block every 2.5 minutes, rather than bitcoin's 10 minutes, which allows Litecoin to confirm transactions faster than bitcoin. Another example is Ethereum, which has smart contract functionality that allows decentralized applications to be run on its blockchain. Ethereum was the most used blockchain in 2020, according to Bloomberg News. In 2016, it had the largest "following" of any altcoin, according to the New York Times.

Significant rallies across altcoin markets are often referred to as an "altseason".

How does the process proceed?

Decentralized cryptocurrency is produced by the entire cryptocurrency system collectively, at a rate which is defined when the system is created and which is publicly known. In centralized banking and economic systems such as the US Federal Reserve System, corporate boards or governments control the supply of currency. In the case of decentralized cryptocurrency, companies or governments cannot produce new units, and have not so far provided backing for other firms, banks or corporate entities which hold asset value measured in it. The underlying technical system upon which decentralized cryptocurrencies are based was created by the group or individual known as Satoshi Nakamoto.

As of May 2018, over 1,800 cryptocurrency specifications existed. Within a proof-of-work cryptocurrency system such as Bitcoin, the safety, integrity and balance of ledgers is maintained by a community of mutually distrustful parties referred to as miners: who use their computers to help validate and timestamp transactions, adding them to the ledger in accordance with a particular timestamping scheme. In a proof-of-stake (PoS) blockchain, transactions are validated by holders of the associated cryptocurrency, sometimes grouped together in stake pools.

Most cryptocurrencies are designed to gradually decrease the production of that currency, placing a cap on the total amount of that currency that will ever be in circulation. Compared with ordinary currencies held by financial institutions or kept as cash on hand, cryptocurrencies can be more difficult for seizure by law enforcement.

What is Blockchain?

A blockchain is a growing list of records, called blocks, that are linked together using cryptography. Each block contains a

cryptographic hash of the previous block, a timestamp, and transaction data (generally represented as a Merkle tree). The timestamp proves that the transaction data existed when the block was published to get into its hash.

As blocks each contain information about the block previous to it, they form a chain, with each additional block reinforcing the ones before it. Therefore, blockchains are resistant to modification of their data because once recorded, the data in any given block cannot be altered retroactively without altering all subsequent blocks.

Blockchains are typically managed by a peer-to-peer network for use as a publicly distributed ledger, where nodes collectively adhere to a protocol to communicate and validate new blocks. Although blockchain records are not unalterable as forks are possible, blockchains may be considered secure by design and exemplify a distributed computing system with high Byzantine fault tolerance.

Why has cryptocurrency grown?

Cryptocurrency has expanded on the promise of decentralized, transparent and direct monetary transactions. As mentioned previously, in order to achieve authority-free exchanges cryptocurrencies use DLTs such as blockchain.

A blockchain is usually managed by a peer-to-peer network (P2P), which allows direct transmission of information between interconnected users. Therefore, cryptocurrencies can be transferred directly between two parties in a simple manner. These transfers are carried out via public and private keys and allow users to avoid the transaction fees charged by traditional monetary institutions.

The growth of cryptocurrency is also attributed to the confidentiality maintained throughout a transaction. Whereas under a cash system a person's transaction history may be examined by the bank in question, cryptocurrency guarantees that each transaction is a unique exchange between parties, the terms of which can vary in every case. This safeguards the users' privacy and protects them from the threat of identity theft, which can be present in traditional systems.11 5 Cryptocurrencies also facilitate international trade, as they aren't subject to interest rates, transaction fees or exchange rates of any specific country.

Using the P2P mechanism of blockchain, international transactions are free from currency exchange fluctuations and other economic phenomena inherent in the traditional system. In terms of security, the strong encryption techniques used throughout DLTs and transaction processes prevent fraud and account tampering, whilst also ensuring user privacy

Cryptocoin Mining Sector

In cryptocurrency networks, mining is a validation of transactions. For this effort, successful miners obtain new cryptocurrency as a reward. The reward decreases transaction fees by creating a complementary incentive to contribute to the processing power of the network. The rate of generating hashes, which validate any

transaction, has been increased by the use of specialized machines such as FPGAs and ASICs running complex hashing algorithms like SHA-256 and scrypt. This arms race for cheaper-yet-efficient machines has existed since the first cryptocurrency, bitcoin, was introduced in 2009.

With more people venturing into the world of virtual currency, generating hashes for validation has become more complex over time, forcing miners to invest increasingly large sums of money to improve computing performance. Consequently, the reward for finding a hash has diminished and often does not justify the investment in equipment and cooling facilities (to mitigate the heat the equipment produces), and the electricity required to run them. Popular regions for mining include those with inexpensive electricity, a cold climate, and jurisdictions with clear and conducive regulations. As of July 2019, bitcoin's electricity consumption is estimated to about 7 gigawatts, 0.2% of the global total, or equivalent to that of Switzerland.

Some miners pool resources, sharing their processing power over a network to split the reward equally, according to the amount of work they contributed to the probability of finding a block. A "share" is awarded to members of the mining pool who present a valid partial proof-of-work.

As of February 2018, the Chinese Government has halted trading of virtual currency, banned initial coin offerings and shut down mining. Many Chinese miners have since relocated to Canada and Texas. One company is operating data centers for mining operations at Canadian oil and gas field sites, due to low gas prices. In June 2018, Hydro Quebec proposed to the provincial government to allocate 500 MW to crypto companies for mining. According to a

February 2018 report from Fortune, Iceland has become a haven for cryptocurrency miners in part because of its cheap electricity.

In March 2018, the city of Plattsburgh in upstate New York put an 18-month moratorium on all cryptocurrency mining in an effort to preserve natural resources and the "character and direction" of the city. As of February 2022, Kazakhstan became the second-biggest crypto-currency mining country, producing 18.1% of the global hash rate. The country has built a compound containing 50,000 computers near Ekibastuz.

How to store Crypto?

A cryptocurrency wallet stores the public and private "keys" (address) or seed which can be used to receive or spend the cryptocurrency. With the private key, it is possible to write in the public ledger, effectively spending the associated cryptocurrency. With the public key, it is possible for others to send currency to the wallet.

There exist multiple methods of storing keys or seed in a wallet from using paper wallets which are traditional public, private or seed keys written on paper to using hardware wallets which are dedicated hardware to securely store your wallet information, using a digital wallet which is a computer with a software hosting your wallet information, hosting your wallet using an exchange where cryptocurrency is traded. or by storing your wallet information on a digital medium such as plaintext.

How to Trade Crypto?

There are parities used by stock exchange companies in buying and selling cryptocurrencies.

Since cryptocurrencies are decentralized and not tied to any central bank or government, their value is determined by the supply-demand balance by buyers and sellers.

Cryptocurrency trading pairs are usually traded using the US dollar (USD) and USDT Coin, which is indexed to the US dollar (exceptionally centralized cryptocurrency). For example, Bitcoin transactions are usually made in BTC/USDT parity. However, cross parities can also be used. Example: XRP/BTC, LTC/XLM (but not highly preferred).

In recent years, some member countries have started to work on integrating their national currencies into the crypto world.

During the conference, we will work on the integration of national currencies of member countries into cryptocurrencies. You will find some of the questions you are expected to answer at the end of this working paper.

Economics

I. ***Block rewards***

Proof-of-work cryptocurrencies, such as bitcoin, offer block rewards incentives for miners. There has been an implicit belief that whether miners are paid by block rewards or transaction fees does not affect the security of the blockchain, but a study suggests that this may not be the case under certain circumstances.

The rewards paid to miners increase the supply of the cryptocurrency. By making sure that verifying transactions is a costly business, the integrity of the network can be preserved as long as benevolent nodes control a majority of computing power. The verification algorithm requires a lot of processing power, and thus electricity in order to make verification costly enough to accurately validate public blockchain. Not only do miners have to factor in the costs associated with expensive equipment necessary to stand a chance of solving a hash problem, they further must consider the significant

amount of electrical power in search of the solution. Generally, the block rewards outweigh electricity and equipment costs, but this may not always be the case.

The current value, not the long-term value, of the cryptocurrency supports the reward scheme to incentivize miners to engage in costly mining activities. Some sources claim that the current bitcoin design is very inefficient, generating a welfare loss of 1.4% relative to an efficient cash system. The main source for this inefficiency is the large mining cost, which is estimated to be US$360 Million per year. This translates into users being willing to accept a cash system with an inflation rate of 230% before being better off using bitcoin as a means of payment. However, the efficiency of the bitcoin system can be significantly improved by optimizing the rate of coin creation and minimizing transaction fees. Another potential improvement is to eliminate inefficient mining activities by changing the consensus protocol altogether.

II. Transaction fees

Transaction fees for cryptocurrency depend mainly on the supply of network capacity at the time, versus the demand from the currency holder for a faster transaction. The currency holder can choose a specific transaction fee, while network entities process transactions in order of highest offered fee to lowest. Cryptocurrency exchanges can simplify the process for currency holders by offering priority alternatives and thereby determine which fee will likely cause the transaction to be processed in the requested time.

For Ether, transaction fees differ by computational complexity, bandwidth use, and storage needs, while bitcoin transaction fees differ by transaction size and whether the transaction uses SegWit. In September 2018, the median transaction fee for ether corresponded to $0.017, while for bitcoin it corresponded to $0.55.

Some cryptocurrencies have no transaction fees, and instead rely on client-side proof-of-work as the transaction prioritization and anti-spam mechanism.

III. Price Trends

The "market cap" of any coin is calculated by multiplying the price by the number of coins in circulation. The total cryptocurrency market cap has historically been dominated by Bitcoin accounting for at least 50% of the market cap value where altcoins have increased and decreased in market cap value in relation to Bitcoin. Bitcoin's value is largely determined by speculation among other technological limiting factors known as block chain rewards coded into the architecture technology of Bitcoin itself. The cryptocurrency market cap follows a trend known as the "halving",

which is when the block rewards received from Bitcoin are halved due to technological mandated limited factors instilled into Bitcoin which in turn limits the supply of Bitcoin. As the date reaches near of an halving (twice thus far historically) the cryptocurrency market cap increases, followed by a downtrend.

By mid-June 2021 cryptocurrency as an admittedly extremely volatile asset class for portfolio diversification had begun to be offered by some wealth managers in the US for 401(k)s.

REGULATIONS TO CRYPTOCURRENCIES

Here are some countries that regulate cryptocurrencies.

You can get information about your country and block by examining it, and you can Google it for detailed research.

THE UNITED STATES OF AMERICA

In 2021, 17 states passed laws and resolutions concerning cryptocurrency regulation. The U.S. Securities and Exchange Commission (SEC) is considering what steps to take. On 8 July 2021, Senator Elizabeth Warren, who is part of the Senate Banking Committee, wrote to the chairman of the SEC and demanded that it provide answers on cryptocurrency regulation by 28 July 2021, due to the increase in cryptocurrency exchange use and the danger this poses to consumers. On 17 February 2022, the Justice department named Eun Young Choi as the first director of a National Cryptocurrency Enforcement Team to aid in identification of and dealing with misuse of cryptocurrencies and other digital assets.

PEOPLE'S REPUBLIC OF CHINA

On 18 May 2021, China banned financial institutions and payment companies from being able to provide cryptocurrency transaction related services. This led to a sharp fall in the price of the biggest proof of work cryptocurrencies. For instance, Bitcoin fell 31%, Ethereum fell 44%, Binance Coin fell 32% and Dogecoin fell 30%. Proof of work mining was the next focus, with regulators in popular mining regions citing the use of electricity generated from highly polluting sources such as coal to create Bitcoin and Ethereum.

In September 2021, the Chinese government declared all cryptocurrency transactions of any kind illegal, completing its crackdown on crytocurrency.

UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND

In the United Kingdom, as of 10 January 2021, all cryptocurrency firms, such as exchanges, advisors and professionals that have either a presence, market product or provide services within the UK market must register with the Financial Conduct Authority. Additionally, on 27 June 2021, the financial watchdog demanded that Binance, the world's largest cryptocurrency exchange, cease all regulated activities in the UK. Some commentators believe this is a sign of what is to come in terms of stringent regulation of the UK cryptocurrency market.

INDIA

At present, India neither prohibits nor allows investment in the cryptocurrency market. In 2020, the Supreme Court of India had specifically lifted the ban on cryptocurrency, which was imposed by the Reserve Bank of India. Since then the investment in cryptocurrency is considered legitimate though there is still ambiguity about the issues regarding the extent and payment of tax on the income accrued thereupon and also its regulatory regime. But it is being contemplated that the Indian Parliament will soon pass a specific law to either ban or regulate the cryptocurrency market in India. Expressing his public policy opinion on the Indian cryptocurrency market to a well-known online publication, a leading public policy lawyer and Vice President of SAARCLAW (South Asian Association for Regional Co-operation in Law) Hemant Batra has said that the "cryptocurrency market has now become very big with involvement of billions of dollars in the market hence, it is now unattainable and irreconcilable for the government to completely ban all sorts of cryptocurrency and its trading and investment". He mooted regulating the cryptocurrency market rather than completely banning it. He favoured following IMF and FATF guidelines in this regard.

TURKEY

Turkey's central bank, the Central Bank of the Republic of Turkey, banned the use of cryptocurrencies and crypto assets for making purchases from 30 April 2021, on the ground that the use of cryptocurrencies for such payments poses significant transaction risks.

EL SALVADOR

On 9 June 2021, El Salvador announced that it will adopt Bitcoin as legal tender, the first country to do so.

SOUTH KOREA

In March 2021, South Korea implemented new legislation to strengthen their oversight of digital assets. This legislation requires all digital asset managers, providers and exchanges are registered with the Korea Financial Intelligence Unit in order to operate in South Korea.

Registering with this unit requires that all exchanges are certified by the Information Security Management System and that they ensure all customers have real name bank accounts, that the CEO and board members of the exchanges have not been convicted of any crimes and that the exchange holds sufficient levels of deposit insurance to cover losses arising from hacks.

QUESTIONS THAT REQUIRED TO BE ANSWERED

Before developing solutions to problems, you should consider the economic orientation of your country. For example, the United States of America is a country with a liberal economy, but the countries in the eastern bloc have adopted a statist approach in economy. You should research the economic management of your country well and make inferences accordingly.

A. What are the considerations when integrating national currencies into cryptocurrencies?

B. Should cryptocurrency exchange companies be taxed? What conditions should be considered when taxing

C. What kind of regulations should the central banks of the countries make regarding the use of cryptocurrencies, should the regulations be limited to taxation only?

D. What precautions should be taken against illegal money transfers?

E. Should countries use decentralized and/or pegged cryptocurrencies when integrating their national currencies into cryptocurrencies? Or should the values of cryptocurrencies be determined by the users in the same supply and demand relationship as in fiat units?

Further Research

https://www.gemini.com/cryptopedia/fiat-vs-crypto-digital-currencies#section-money-is-evolving

https://en.wikipedia.org/wiki/Cryptocurrency_exchange

https://en.wikipedia.org/wiki/Cryptocurrency_wallet

https://en.wikipedia.org/wiki/Cryptocurrency_and_crime

https://en.wikipedia.org/wiki/Legality_of_cryptocurrency_by_country_or_territory

https://en.wikipedia.org/wiki/Cryptocurrencies_in_Europe