

International Monetary Fund (IMF) Study Guide

Singularity Foundation Model United Nations
SMUN 2030

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Welcome letter

Dear delegates,

In a world run by technology and new discoveries, the term "cryptocurrencies" is not so strange. Thanks to the internet, we are able to discover new things, communicate and even make money and control our personal economy.

Currently, not all countries have an internet connection or new technologies in the world of economics, most likely, in 2030 this will have changed. Underdeveloped third world countries will have the economic capacity to update their way of life. The creation of access points for citizens and the modernization of these will open a new digital world for them to discover. The legalization of cryptocurrencies will be an important advance in these countries.

With the introduction of cryptocurrencies, blockchain and other terms these people will be able to take their lifestyle to another level. Despite these advances and improvements in the lives of third world countries, corruption will not have been eliminated. The use of digital currencies can give us the possibility of reducing this corruption. If these fraudulent conducts were eliminated, the economic growth in any country could be enhanced but especially in developing countries.

With this financial increase, the lives of millions of people could improve. Not only could they have better health, education and lifestyle, but they could also help future generations.

How can cryptocurrencies help with corruption? How can we use them to increase the global economic level?

The Singularity Foundation Model of United Nations and this committee is challenging you this 2021 to investigate and research how cryptocurrencies can help from different points of view. This new edition of the MUN is important because we will look towards the future. It not only focuses on current problems, but on finding solutions to improve the lifestyle in all areas in the future. This committee gives you the opportunity to develop your technological and economic knowledge with the objective to improve the future via combining these two areas of study.

We understand that having to participate in this SMUN 2030 remotely could be seen as uncomfortable or maybe even disadvantageous. However, we must all look for the benefits and exploit these to our own advantage. Extraordinary times require extraordinary solutions, and as delegates it is also part of your duty to be able to adapt to these. With this said, we hope you work hard, learn new things, make friends and above all, enjoy yourselves.

Chair Biography

Chair Director

Just two years ago I was in the same exact position as most of you are, it was my first time participating in a Model United Nations. I can remember that my biggest worry was uncertainty, I was not sure what was expected from me nor how to achieve it. Fortunately, I was guided by my teachers, chairs and fellow delegates throughout the whole way and I can assure you that we, chairs, will do everything possible to make you feel the same. The best advice I can give you all, from my personal experience, is to be yourself (while maintaining the ideologies your country represents)and participate as much as possible in order to generate fruitful and enjoyable debate.

In a nutshell, the MUN is a life changing experience because it encompasses so many different necessary skills for your academic, professional and personal growth. I realized this when I had to write different clauses for my resolution whilst convincing other people why my ideas were better than theirs through civil dialogue and debate.

I personally have experienced two different MUNs. My first MUN was in Barcelona at St. Peter's and the other was in New York at the United Nations headquarters. I am 100% sure that if you are somebody that is interested in: politics, international relations and public speaking, like I am, this will be a really enjoyable experience for you.

Finally, I hope to meet you all very soon and to see how you develop throughout this unforgettable experience. Best of luck fellow delegates,

Esteve Company (Barcelona)

Chair Assistant

Hello, fellow delegates and welcome to this new edition of the Singularity Foundation Model of United Nations. I am Alexia Rueda, the Chair Assistant in the International Monetary Fund. This is my first time in this position, but I am really glad I could get this opportunity to learn with the new Chairs and all of you, delegates.

My first MUN was in 2019, and even though I was extremely nervous and I was really concerned about my speaking skills, I decided to give it a try. It was one of the best decisions I have ever taken, since it gave me the confidence to talk in front of an audience in English and meet new people. You learn new things about interesting and important topics nowadays and about your abilities too. I took the opportunity to develop my social skills too and I ended up meeting amazing people who taught me a lot in just a few days.

I was interested in the International Monetary Fund Committee because it is something present on a daily basis throughout our lives and people rarely have information about the new technologies in the economic world. So, now that I am participating in this project from a different point of view I want to try and learn something new thanks to the process of making, for example, this Study Guide.

I hope you work hard and enjoy this experience!

I am looking forward to meeting each one of you,

Alexia

Introduction to Committee

The International Monetary Fund (IMF) is an organisation of 189 countries that works to foster global monetary cooperation, secure financial stability, facilitate international trade, promote high employment and sustainable economic growth, and reduce poverty.

After two world wars and the Great Depression, both Europe and the United States suffered a massive economic destruction. After these events, the need and desire for the creation of a new international monetary system grew. This new system would stabilize currency exchanges, reduce the balance of payment deficits (the BOP is a statement of all transactions made between entities in one country and the rest of the world) and eliminate mercantilist trade policies. All of these without restricting the individual economic growth of each country.

Finally, in July 1944, 45 representatives from different countries met in Bretton Woods, New Hampshire. All of them believed and agreed that the creation of a framework for economic cooperation was necessary to avoid more disastrous events. The International Monetary Fund began to operate on March 1, 1947, despite the fact that in 1945, 29 member countries signed the Articles of Agreement. Later that year, France became the first country to borrow from the IMF.

The Bretton Woods system replaced the Gold Standard System with the United States dollar as the global currency and this made the country the dominant power in the economy world. This system came to an end between 1968 and 1973 because of a crisis that the dollar struggled with through the 1960s.

Since the collapse of the Bretton Wood system, IMF members have been free to choose any form of exchange arrangement they wish. The fact that each country was free to decide any form of exchange helped them overcome the increasing price of oil.

After a crisis in Mexico in 1982, the IMF realized that no country would benefit if each one of them failed to repay its debts. This meant a reform in those countries who had a debt and improving the cooperative global measures.

The IMF started to provide concessional financing through the Trust Fund in the mid-1970s. In 1986, the IMF created a new concessional loan program called the Structural Adjustment Facility, which succeeded in 1987.

After the fall of the Berlin Wall in 1989 and the dissolution of the Soviet Union in 1991, all those countries who were not able to join the Fund could now do it. In just three years, 20 countries joined the IMF and the staff expanded nearly 30 percent. The IMF was able to help the former Soviet countries transition from central planning to market-driven economies.

In 1996 the Initiative for Heavily Indebted Poor Countries was launched to ensure that no developing country would face a debt they could not pay back.

In 1997, East Asia suffered a wave of financial crises. Almost every country affected asked the IMF to help them with financial assistance and advice on how to reform their economic policies. The Fund came under intense criticism because of the conflicts about how to solve

the crisis. This experience taught the IMF several lessons on how to cope with similar events and how to respond in the future.

The crisis that started in the United States in 2007 because of the collapse of mortgage lending in the U.S spread around the world in 2008, creating an imbalance and irregularity in the global capital flows. This was the worst global downturn since the Great Depression. Every country affected requested the IMF for financial help and policy support. Thanks to creditor countries, the IMF's capacity to lend financial help was tripled. After some reforms, studies and the creation of a flexible credit line, the Fund was able to help the needs of the countries.

As it was said before, the IMF is an organisation of 189 members being Nauru the last one to join it on April 12, 2016. A resolution in the International Monetary Fund needs 85% of the members' votes to pass.

Topic: Cryptocurrencies and Blockchain Technology to abolish corruption and increase economic growth in 3rd world countries

Since the invention of the internet and the first computer, the human race has been, and still is, in constant exponential growth when it comes to technology. One of the latest advancements has been the creation and implementation of blockchain, and hence the creation of cryptocurrencies.

Thanks to the work of a group of talented programmers, who in the 90s found an improvement for how electronic transactions were made, blockchain was born. This technology, which would then be used to create cryptocurrencies, is currently the backbone of the electronic economy as well as for many technological projects. Blockchain is recognized universally as the fifth evolution of the computer science world.

This revolution translates worldwide into a possible change in the economy, where currencies will not depend on national government institutions, such as banks, but will instead be in the hands of the private enterprises.

On another note, unfortunately there is still a huge amount of corruption in 3rd world countries mainly due to corrupt systems which in many cases are directly related to their technological infrastructure. Could Blockchain and cryptocurrencies be the solution to said problem?

Definition of Key Terms

Blockchain is a ledger technology that has three main characteristics: decentralization, security and scalability. Blockchain's vital functionalities are the following: data structure organized in units called blocks, encryption of chain links so that it cannot be decrypted and changed, and a network of nodes that are responsible for the management, creation and validation of the data structure.

- *Block:* is the component that saves the data associated with a cryptocurrency transaction, related to a smart contract or other data that can be saved in electronic format. Each of the blocks contains information from the previous block, so that this information is also part of the block. This peculiarity allows that the content of a block cannot be changed without altering the chain completely. The data that is stored in each block can be of different nature. In the environment of virtual currencies or cryptocurrencies they serve to indicate who is the holder of one of them. Any data that is recorded in the block can be consulted by users, thanks to asymmetric cryptography.
- Chain: is a hash¹ or code generated by cryptography² that joins two blocks and is created from the data that is contained in the previous block. In this way the code is unique, locking them in time and in the position of the block. Each hash is created from a piece of information from the previous block except the first one in the chain that is created without that feature. These hashes are created by cryptographic programs that consume a lot of time because they need to perform many mathematical operations. The idea then is that the nodes help create the hash and get a reward, in the form of coins generally, so that they continue to create them. Such is the power and time used in the generation of hash by the nodes that in order to know the starting information from the hash, a single computer would be years making calculations and would be

¹ Function that converts an input of letters and numbers into an encrypted output of a fixed length.

² The practice and study of techniques for secure communication in the presence of third parties called adversaries.

unable to obtain it. Modifying any of the blocks that make up the chain would reveal that the information is not correct, so any nodes supporting the modified chain will be rejected.

- *Node network:* it is formed by the network of computers that contain a copy of the blockchain, approve currency transactions or smart contracts and record them in the chain. The network formed by the nodes or teams that work for the chain is based on P2P (Peer to Peer) technology, which is a network where there are no servers and all the teams work as equals. This network serves so that the nodes that create the blocks and validate them collaborate with each other by exchanging the necessary information. The process by which the blocks are validated is called POW (Proof-Of-Work) and is based on the validation of the block by the nodes that are working in the P2P network.
- *Mining process:* Blockchain is a decentralized and distributed network, thus the work to be done by any device that connects to this network will consist in processing transactions. Mining is the center of the system that is also responsible for making hash codes through very complex calculations. In this way, the more miners are working to calculate it, the harder it will be to corrupt the block and therefore it will be safer. That is why mining work is usually paid with the Blockchain currency.

Current Situation

The current situation in the legal and policy landscape surrounding cryptocurrencies are different depending on the country, so we will write about some of them: the European Union, Uganda, Tajikistan and Kyrgyzstan being these last three some of the poorest countries in the world.

In the European Union, on April 19, 2018, the Fourth Anti-Money Laundering Directive adapted the changes proposed in 2016. This directive talks about the prevention of the use of the financial system for the purposes of money laundering or terrorist financing. It includes a definition of virtual currencies "a digital representation of value that is neither issued by a central bank or a public authority, nor necessarily attached to a fiat currency, but is accepted by natural or legal persons as a means of payment and can be transferred, stored or traded electronically."

On February 12, 2018, the European Supervisory Authorities for securities, banking, and insurance and pensions warned consumers regarding virtual currencies, stating that they are "highly risky and unregulated products and are unsuitable as investment, savings or retirement planning products." Also, the President of the European Central Bank, Mario Draghi, said the same thing about digital currencies, adding that "work is under way in the Single Supervisory Mechanism to identify potential prudential risks that these digital assets could pose to supervised institutions."

On March 8, 2018, the European Commission presented an Action Plan with the objective of taking advantage of the opportunities presented by technology in the financial and economic world.

In conclusion, the EU takes advantage of the positive things about cryptocurrencies but also warns its citizens about the dangers of using them if they are not careful.

In Uganda, in February 2017, the Bank of Uganda published a warning stating that "whoever wishes to invest their hard earned savings in Cryptocurrency forms such as One-coin, Bitcoin, Ripple, Peercoin, Namecoin, Dogecoin, Litecoin, Bytecoin, Primecoin, Blackcoin or any other forms of Digital Currency is taking a risk in the financial space where there is neither investor protection nor regulatory purview. The public is hereby warned that whoever deals with "ONE COIN DIGITAL MONEY" does so at his or her own risk.".

The Ugandan government has stated that cryptocurrencies are not recognized as legal money and that no organizations have the license to sell virtual currencies.

In Tajikistan, on January 15, 2018, the National Bank of Tajikistan warned the citizens of the republic about the dangers of using cryptocurrencies. They stated that due to their anonymity, many transactions with digital currencies can be used for illegal operations.

The government does not have any intentions of using this technology but it is not banned, since there are some blockchain projects in the country with the aim of improving the financial inclusion of the country.

In Kyrgyzstan cryptocurrencies were banned in 2014, when the National Bank of the Kyrgyz Republic stated that "Under the legislation of the Kyrgyz Republic, the sole legal tender on the

territory of our country is the national currency of Kyrgyzstan som. The use of 'virtual currency,' Bitcoins, in particular, as a means of payment in the Kyrgyz Republic will be a violation of the law of our state." The bank also warned the citizens about the lack of regulation and a high level of volatility of these virtual currencies. Even though this law exists, cryptocurrencies are present in the country. As Valery Tutykhin stated that "Our local investment market infrastructure can be used to legally invest into any crypto assets. Does someone want to buy cryptocurrencies? Let him do it through the local commodities exchange, and he will pay local taxes. Does someone want to raise capital for a startup through an Initial Coin Offering? Let him do it through the local stock exchange. Its listing rules are not so complex."

One thing that is not banned is the development of blockchain-based projects.

In conclusion, in developing countries we can observe that the use of cryptocurrencies is banned or limited because virtual currencies are not controlled by the government or banks. This means that they do not have any control over them and that is the primary reason why governments are afraid. One of the other reasons why the governments are afraid is because of the connection between digital currencies and crime. For example, some illegal activities can benefit from the ability to move money in untraceable ways.

Past UN Action / Past International Action

Since October, 2019, UNICEF has accepted cryptocurrencies as donations. The donations will be used to fund open source technology benefiting children and young people around the world. This will be possible thanks to the creation of the UNICEF Cryptocurrency Fund. Henrietta Fore, the Executive Director stated that "If digital economies and currencies have the potential to shape the lives of coming generations, it is important that we explore the opportunities they offer. That's why the creation of our Cryptocurrency Fund is a significant and welcome step forward in humanitarian and development work." This Fund is part of UNICEF'S ongoing work with blockchain technology.

The UN has some ongoing projects to help people in need using cryptocurrencies and blockchain. For example, the World Food Program (WPF), who successfully used the ethereum blockchain to transmit Pakistani rupees to 100 people in 2017. The goal of this is to reduce the costs, since the money will be sent directly to the merchants the cost will be lower because

there will be fewer transactions, no admin fees and the risk will be lower because the money will be sent after an actual purchase has been made. The use of cryptocurrencies would not only help and improve many lives, but also reduce costs, risks and normalize the use of virtual currencies in third world countries.

Some other project was Game Changers. It worked for two months in 2018 and it raised around 2 700€ from almost 800 contributors. Many of these contributors had never donated to humanitarian causes, but this new type of project caught their attention. It was simple, they just had to leave their PC on and install a software called Claymore that would do all the work. As said before, thanks to cryptocurrencies a certain number of money has been possible to raise because of the facility to use new technology. Once again, it helped people and increased the economic level of people in need, it also helped with other UN projects.

TITANIUM, a project launched in 2017 and which aims to research, develop, and validate novel data-driven techniques and solutions designed to support Law Enforcement Agencies (LEAs) charged with investigating criminal or terrorist activities involving virtual currencies and/or underground markets in the darknet. In this project 15 partners participate and it is cofunded by the European Union's Horizon 2020 Programme. The project can monitor trends in virtual currency and darknet market ecosystems, analise transactions across different virtual currency ledgers and generate court-proof evidence reports.

The Financial Action Task Force (FATF) is an inter-governmental body established in 1989 by the Ministers of its Member jurisdiction. The objectives of the FATF are to set standards and promote effective implementation of legal, regulatory and operational measures for combating money laundering, terrorist financing and other related threats. In 2015, the FAFT published recommendations directly related to virtual currencies. For example, in the recommendation 1 they advise the countries to coordinate risk assessment of virtual currencies products and services. Another one, recommendation 26, where FATF suggests countries should ensure convertible VC exchanges are subject to adequate regulation and supervision.

Possible considerations and Conclusion

Before writing your resolutions you must remember the downsides of Blockchain and cryptocurrencies, such as environmental damage, fraudulent use of these and maybe the difficulty of implementation, in order to defend your opinions in the best possible way.

Remember, that Blockchain is a rapidly changing technology and that new forms of said technology arise constantly. The key to a better form of Blockchain will quite possibly lay in type (for example: Proof Of State, Proof Of Work and others).

In conclusion, Blockchain has transformed the world we live in today, and it will continue to do so at an exponential rate. Thanks to this innovative technology, digital currencies are more popular than ever but are currently only being used in a small portion of the world. This could be due to the difficulty of implementing it in 3rd world countries because of their lack of technological infrastructure, but it might quite possibly be the appropriate time to do so. Unfortunately, a big issue that non-affluent countries strive to leave behind is corruption. Most corrupt governments are getting away with being corrupt in the most modern ways, and as they say "Modern problems require modern solutions", and Blockchain and cryptocurrencies are quite probably the solution.

Sadly, non-affluent countries cannot do this on their own so it is the UN's, and all the members comprising it, duty to do so. The question is, Will the majority of member states be able to reach a consensus and approve a resolution aiming to abolish said issue?

Guiding questions

- 1. How should Blockchain and cryptocurrencies be implemented in 3rd world countries?
- 2. Why, or why not, is it necessary to implement Blockchain technology and cryptocurrencies in 3rd world countries?
- 3. Should technologies such as Blockchain be regulated?
- 4. Should transactions made with virtual currencies be regulated?
- 5. Should central banks appropriate these currencies?
- 6. How will corruption be stopped with Blockchain and cryptocurrencies?
- 7. Should the exchange of virtual currencies to real currencies be prohibited in order to avoid speculation?
- 8. How will Blockchain's and cryptocurrencies' downsides be solved?
- 9. Should the UN encourage the use of Blockchain as a secure data registry, and why?
- 10. Are cryptocurrency safe for citizens?
- 11. Could Blockchain technology be a freedom tool for citizens?

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