

**CRYPTOCURRENCY DIALECTICS AND THE INTERNATIONAL FINANCIAL MARKET****Emzar JGERENAIA***Ivane Javakhishvili Tbilisi State University, Georgia  
emzar.jgerenaia@tsu.ge***Abstract**

*The topic of research concerns a very important issue for financiers - the essence of cryptocurrencies, the substance. There are many scholars and experts working on this topic today, both in Georgia and abroad, however, its understanding in the financial aspect and the exact description of what we are dealing with, is not yet clear. The crypto-era is a multi-faceted event and its financial aspects are less studied, especially in a developing country like Georgia. After the collapse of the Soviet Union, these newly emerging countries, including Georgia, had to create their own currency. It has been a very difficult and long way to go with its hyperinflations. The memory of Georgians still remembers the problems of the kupon emission (the first quasi-money element of Georgia). Therefore, there is a particular fear of new currency emission, relative to the countries of the region, but at an early stage when there was a "mining" boom, Georgians took the leading positions in cryptocurrency mining. Subsequently, when the bitcoin rate dropped against the dollar, Georgians were frustrated. That is why this issue is important for Georgian science and economists. Let's go back to the financial aspect of this event again.*

*Why do we decide to research this problem? What is our purpose. What is cryptocurrency itself - is it a Silicon Valley war against Wall Street or is it a challenge of the century for financiers?! What is it - the task of financiers making new money or fun for IT specialists?!*

**Keywords:** *Cryptocurrency; The world financial market; Currency systems; The genesis of money circulation; International transfers*

**JEL Classification:** *E41, E42, G01, G15*

**I. INTRODUCTION**

The history of mankind is familiar with decentralized and centralized systems of money emission. The 20th century was a triumph for a centralized system, and the modern era of cryptocurrencies is an attempt to return to a decentralized system. More than a decade has passed since an unknown stranger has discovered or created a mathematical algorithm, based on which some unknown traffic is on your computer and a man, so called miner (bitcoin extractor) also receives bitcoins in an unknown manner. Here begins the first fear and misunderstanding. Money emission is a financial process, and it is not clear today how abundance is appropriated, distributed and emitted. For more than a decade many things have happened. Many have gone through cryptocurrencies, had ascending and descending phases, created a unique currency such as bitcoin, and more than a thousand cryptocurrencies have been registered for today, among them the most notable is the creation of cryptocurrencies announced by Facebook owner Mark Zuckerberg. The process went so deep that on October 24, 2019, the US Senate held a large-scale hearing in which Mark Zuckerberg was asked about the shades of that currency.

Second, a very important question is what happens – have the financiers disappear? Are they no longer needed? Did the market demand that Vitalik Buterin create the Ethereum or did these IT specialists themselves create it? There are quite a few serious people working around this problem, including Charlie Cooper, Larry Summerson, and Rosen Weir by order of Merrill Lynch, from which we can conclude that this is a serious cause-and-effect relation to existing reality, a connection when the Internet has entered into a new phase. Which made it possible to emerge cryptocurrencies and it became an irreversible process.

Part Three - When we research this topic we get the impression that computer systems, motherboards are separate, they do something, but people don't know what. So do we think this is real or not? In order to understand the essence of this event, we need to consider a few moments: The first moment is the myths around the world of money circulation from ancient times to the present.

**II. HISTORICAL ASPECTS OF THE PROBLEM**

To dig deeper into the essence of the cryptocurrency problem - let's look at the historical path taken by money, let's consider it in historical terms. Also, look at the myths and problems associated with currency development.

Existence of money was always accompanied by a problem how to save it, it was related to costs. For the merchants and the political elite it was an expensive luxury to save money from robbers, demanding high costs and delayed payments.

The next problem was the flow of money and currency. Until the emergence of modern international clearing centers and the IMF, no one could solve this problem. Even today, move of money is quite a costly affair. Mankind is just thinking about how to deal with this problem.

There is also the problem of increasing the value of the currency - so to say the problem of investing - in order for the currency not to be seen as a bounty, it must increase in time and bring in revenue. So the problem is where to invest money for maximum profit and security.

The next problem is currency exchange and circulation. Especially in the international and global business. One of the most difficult moments is payment and cash flow, which is also costly and risky one. The financial world is looking for ways to reduce these costs.

To sum up, the problems in the economy and in international trade have forced mankind to look for new ways where there would be reliable money storage, fast and cheap money flow, value growth and investment in the electronic and digital era. So for years mankind has been moving towards cryptocurrency by logic. Two uneconomic developments - the invention of the Internet and blockchain technology - have made this dream come true. So myths about money circulation are actually alive.

The point of constant debate is to secure cryptocurrencies. How is it secured? With confidence. Historically this has been the so, except for a brief period of the gold standard in the late 19th and early 20th centuries, though the gold standard could not save the US from the Great Depression. For example, according to historical records, Genoa was a huge antique harbor, and of course most pirates and merchants in this city kept treasures there, lived in the harbor, consumed all goodness and had a document that their treasures were in this or that warehouse and with some defined person. So they were constantly flipping this document, which we later called banknote and wexil. But historically, money has always been something that people trusted, whether by force or by will. In medieval Italy, there were many banking houses. But the clients especially trusted the Medici bank house. That means, that the circulation of money was based on trust from the beginning, and it is not a new one. It was also same in Georgia. In medieval centuries, silver was written on copper coins and of course you had to accept it by coercion. As for return back to the gold standard, due to the volume of modern international trade, this will be a hindrance to global trade.

### **III. THE GENESIS OF CURRENCY SYSTEMS – CRYPTO CURRENCY, THE REAL REASONS FOR ORIGIN**

It's an interesting moment in the late 19th century - The era of central banks and the establishment of the gold standard system have begun, where the role of the central bank will emerge in the early 20th century. That is, the central government prints and emits money. It was a privilege for the central government, the government fought for this privilege, and the people who created the cryptocurrency are now fighting for that privilege as well. The state was granted the right to cut money and thus generate income and value. Thereafter, trade is growing, the commodity mass that this money is supposed to serve increases, and the international clearing system is emerging in parallel.

The next step in the world financial system was the creation of the Bretton-Woods system (International System of Monetary Relations and Trade Reporting, adopted at the Breton-Woods Conference) and the world switched to the gold currency system. By this time, the US dollar has become the main currency, the International Monetary Fund is set up, that is exactly what influences the currency and is responsible for it.

Europe is starting to think about creating a common currency, developing a currency tunnel system, and starting shift to a creeping exchange rate since the mid-1970s. Here's one interesting detail - the problems that we have listed above still exist. But there is one difference - The US dollar is the major currency of the circulation, accumulation, investment, maintenance and payment of money in the world, which has partially solved the eternal problems of money circulation.

Money flow during this period is associated with several technical advances. The first is the emergence of a 5,000-kilometer telegraph line from New York to London; Electronic transfer of money by telegram and creation of electronic records.

Appais nostro and loro account and the money transfer are the records on these nostro and loro accounts. So, electronic records are created here for the very first time. Here we are talking about the fact that the money was actually electronic. I remember a period when we were transferring money from "Vnesheconombank". When we established correspondent relationships with the bank, we exchanged these codes, which was like a solid notebook of a few sheets, where were the numbers and the rules for creating the algorithm. This algorithm involved the date, amount, code assigned to the Correspondent Bank, and so on. and a combination of digits. By combining these numbers, we created certain encryption with a key of 2 persons - the director and the accountant, and with these two keys was confirmed the transfer and telegraphed it to our correspondent bank.

Similarly, from there we received a combination of numbers with an encrypted telegraph. These were modern transfers in the late 90's. It was actually money, crypto existed from that time. What are we really dealing with - what is crypto, what is cryptocurrency? Crypto is a sign, a code.

Swift, Fedwire, Chips. Transfer forms have been changed by the internet. Slowly new electronic approaches have emerged, electronic payment systems including Swift, Fedwire, Chips. This is a very important moment - the system as completely switched to electronic transfer and internet, so investing in the Internet was a quick step, everyone was convinced that the Internet would make a profit shortly, that there would be big changes and everything would be changed as well. But exactly what it would bring and what direction the epochal changes would take place no one knew. No specific direction was specified, though it was very intensively invested in Google, Oracle and other Internet companies. In 2008, the Internet made a huge step forward, enabling the world to see new currency in the form of cryptocurrencies.

There are several problems facing humanity today:

1. Transfer from subject A to subject B takes a very long time - the current rate is a spot rate and it also takes 48 hours to convert. 48 hours is 2 days and nights and it is quite a long time for my money to be available to others, so during the period we could use our money and earn some profit. This is a time problem.

2. The second problem relates to the cost of transaction fees - we pay commissions, insurance fees, if the intermediary bank is required the amount of its services in case of accreditation and acceptance, and so on.

3. The third issue - Due to the current geopolitical situation, some countries (for example Iran, Russia) may face different kinds of economic sanctions and blockades, which means that your money movement may be at risk.

4. Exchange rate changes and rising inflation are one of the biggest problems and risks. Inflation is a global illness and currency validity is a daily challenge, both of them are seriously damaging to the business.

5. The next problem is the uncontrolled printing of money by the central banks and the constant deficit of the budget. This causes the problem of foreign and domestic debt growth. In the main, this challenge is addressed at the expense of the population. That actually caused the financial crisis of 2008. The printing of money and the issuance of bonds are very uncontrollable, as a result of which debt is one of the biggest problems in the world today.

The solution to these problems was seen in the form of cryptocurrencies. Electronic money has been invented that has the potential to solve the above problems. This is a transfer directly. As soon as the record from your account is transferred, it is reflected into the recipient's record instantly. You pay the minimum tax for this. In addition, transactions with intermediaries are not discussed or registered. There is unified money and it is very important. Also while borrowing loans no intermediary loans are registered. This problem needs support in the economy and it has absolutely no dark side.

#### **IV. TECHNICAL DETAILS – BLOCKCHAIN AND INTERNATIONAL EXCHANGES**

In the way to solve this problem with the development of computer technology and the development of speeds was created the wonder of the 21st century blockchain, which is the basis of all cryptocurrencies. What is Blockchain? Blockchain is an international, unified registry, a single accounting book, where all records are made once and it is discarded to be repeated. If you wish to steal currency from Blockchain, you must rechange all previous transactions.

Blockchain is arranged as a honeycomb - the previous cell is the basis for the next cell, the previous operation is the basis for the next operation. Blockchain is not money, it is just a registry. No matter for what we use it - for registration of weddings, property or banking transactions. Blockchain is a registry that operates quickly and interdependently. It is a wonder of the 21st century, a large computer, a server, a motherboard that performs tremendous speed and number of operations.

As a subject of research I would like to separate blockchain and cryptocurrencies, whether it be bitcoin or Ethereum, it has absolutely no sense what we call it. It is talked, that there is a lot of risk involved with cryptocurrencies, it seems to be vulnerable, hacker attacks occurs often, etc. But let's don't think about it. Because neither bitcoin nor Ethereum, is a bubble nor can it be, It is a somewhat computerized system that creates and processes certain information and becomes more powerful every day.

Blockchain is a box, a great server. Blockchain is not money, it represents operations in which all transactions have original code. The code may be read, but who's behind it, you don't know the name. That is why critics of the cryptocurrency and government officials say it should be regulated. However, as proponents of cryptocurrencies claim, the idea of creating it is freedom and it has to be free of regulation.

## V. CONCLUSION

Whether someone likes it or not, today the fact is that the existence of cryptocurrencies on the New York Stock Exchange, on the world stock market is a tangible reality. ICO (the same of cryptocurrencies IPO) has become a common occurrence. Cryptocurrency is a real product on the New York Stock Exchange and its circulation is in compliance with economic laws, whether we want it or not, it is a reality, this reality is numbered in the hundreds of billions and today is a full-fledged representative of international financial exchanges. That is, it already has a financial face. It is an organic part of the financial system. Naturally, central banks and governments must recognize the status quo and think of a scheme of peaceful merging of the two worlds.

One thing is clear, cryptocurrency is reality, no one can deny its existence, first of all it is a recognized player in the international financial market, Its capitalization has exceeded 400 billion USD and the IMF also gives specific guidance to the central banks of the countries on its future. The international economy is incredible today without cryptocurrencies. Today it is the great player and logical finale of mankind's ten-century dream - Putting the goods directly in front of the commodity exchange, the non-barrier function of money and the minimum costs in the formula commodity-money-commodities. Cryptocurrency has been invented by mathematicians, and it has taken its place in the international financial market by itself.

## VI. REFERENCES

1. Bernanke Ben S. (2015). *The Courage to Act*, 500 Fifth Avenue, W.W. Norton & Company, New York, pp.133-175.
2. Acharya V.V., Cooley T.F., Richardson M.P., Walter (2011). *Regulating Wall Street*, John Wiley & Sons, Inc., Hoboken, New Jersey, USA, pp. 35-71.
3. Greenspan A. (2009). *The Age Of Turbulance*, 2nd end., The Penguin Press.
4. Vigna P., Casey M.J. (2018). *The Age of Cryptocurrency*, 2nd ed., ST. Marton's Press, New York
5. Gaganidze, G. (2016). *Georgian Export Potential Utilization on the EU Market*, Journal of International Management Studies, Volume16, Number 1.
6. Jgerenaia, E. (1996). *Problems of Foreign Currency Exchange and Dealing*, Monograph.
7. Jgerenaia, E. (2002). *Basics of Techniques of Custom Operations*, Monograph.
8. Jgerenaia, E. (2005). *World economy without Alan Greenspan or what is in store for us tomorrow*, Magazine „Sakartvelos Ekonomica“ (Economics of Georgia), Issue 9, ISSN 1512-4606
9. Jgerenaia, E. (2006). *What is in store for GEL and the prospects of the Georgian financial market, Credit-currency policy contrary to the world trends and obstacles to the Georgian economy*, Magazine „Sakartvelos Ekonomica“ (Economics of Georgia), Issue 11, ISSN 1512-4606
10. Jgerenaia, E. (2008). *Challenges of virtual Consumption Banking Credits and Theory of Creativeness Monaco system in supply and demand, Bull Trend of modern banking and financing system*, Magazine „Sakartvelos Ekonomica“ (Economics of Georgia), Issue 3, ISSN 1512-4606
11. Jgerenaia, E.; Ghaniashvili M. (2008). *The 10-th anniversary of the World Crisis and the beginning of the new one*, Magazine „Sakartvelos Ekonomica“ (Economics of Georgia), Issue 9, ISSN 1512-4606
12. Jgerenaia, E. (2009). *New Paradigm of world economy*, Magazine „Sakartvelos Ekonomica“ (Economics of Georgia), Issue 2, ISSN 1512-4606
13. Papava, V. (2013). *Economic Reforms in Post-Communist Georgia: Twenty Years After*. New York: Nova Science Publishers.
14. Silagadze, A., Zubiashvili, T. (2015). *Parameters of the European Union and the Post-Soviet Georgia's Economy*. Refereed International Journal of Business and Management Studies (IJBMS), pp. 441–448.
15. Silagadze, A., Atanelishvili, T. (2014). *The main economic indicators of the EU and Georgia "Topical problems of the development of economy and economic science."* Collection of scholarly works of Paata Gugushvili Institute of Economics TSU, pp.50-52.
16. Silagadze, A., Atanelishvili, T. (2010). *Modern state finances of Georgia*. International Academy of Sciences, Education, Industry and Arts. San Francisco (USA).
17. Silagadze, A., Zubiashvili, T., Atanelishvili, T. (2016). *The Use of Drinking Water in the Conditions of Maintaining Ecological Balance*. Refereed International Journal Ecoforum. Vol. 5. №1, pp. 65-69.
18. Silagadze, A., Tvalchrelidze, A., Zubiashvili, T., Atanelishvili, T. (2016). *Aspects of China's Economic Development*. Refereed International Journal Ecoforum. Vol. 5. №1, pp. 47-64.
19. Silagadze, A., Zubiashvili, T., (2016). *Foreign Direct Investment in Georgia*. International Journal of Arts and Sciences. Vol. 09. Number 02., USA. pp. 63-71.
20. Zubiashvili, T., Atanelishvili, T. (2019). *Some Aspects of the Georgia – CIS Trade Relations*. Refereed International Journal Ecoforum. Vol. 8. №2.
21. Zubiashvili, T., Atanelishvili, T. (2017). *Some Aspects of National Economic Doctrine*. Refereed International Journal Ecoforum. Vol. 6. №1.
22. [www.geoeconomics.ge](http://www.geoeconomics.ge)
23. <https://www.geostat.ge/ka>
24. [www.bloomberg.com](http://www.bloomberg.com)
25. <https://www.dol.gov/general/topic/statistics>
26. <https://www.imf.org/external/index.htm>
27. <http://www.oecd.org/>