BLOCKCHAIN RESHAPES INTERNATIONAL TRADE BUT WILL CRYPTOCURRENCY DO SO TOO?

"I find the great thing in this world is not so much where we stand, as in what direction we are moving: To reach the port of heaven, we must sail sometimes with the wind and sometimes against it, – but we must sail, and not drift, nor lie at anchor."
– Oliver Wendell Holmes Sr. (1809 – 1894), an American physician, poet, and polymath. Quoted from his book "The Autocrat of the Breakfast-Table"

Introduction: Information Technology Means Today

We are living in a truly wonderful era. If you do not agree with this statement, then count your blessings. State-of-the-art means of communication, possibilities to travel fast and safely, access to high-quality medical services, the right for education, and many other such delights are embedded in our everyday lives so heavily that most of us take them for granted. Indeed, they are a product of the evolution of both technology and society.

Nowadays, the world is being involved in the Fourth Industrial Revolution which is also referred to as Industry 4.0. There is even a thought expressed by Dr. G. Lyons that we are witnessing the Fifth Industrial Revolution since "...the second was electrification, the third mass consumption and the fourth technology. The fifth involves genomics, artificial intelligence, robotics, nanotechnology and even waste." [5]. Nevertheless, the Industry 4.0 has started in the early 21st century with the mass application of the achievements in IT in production of goods and services. Things and concepts like blockchain, Internet of Things, Big Data, artificial intelligence (including machine and deep learning), cryprocurrency and digital tokens, 3D print, nanotechnology, etc., are adjusting the present times and will definitely stay evolving in the future. Additionally, the current stage of technological development and geopolitical factors facilitate the globalization and financialization of global economy. Therefore, the international trade is being shaped too.

What About International Trade?

International trade is what can bring prosperity and positive image to a country by means of activating local businesses. Protectionism is rather a limited economic policy used by those states which unawarely do not intend to grow economically in the long run. Today, protectionism simply does not work since globalization affects most aspects of life: offshoring of jobs, labour migration, etc. Trading across countries' borders enhances competition between different companies within national economies. The proved evidence demonstrates that firms need to progress in technologies and cut their cost of production in order to succeed in a cruel and, at the same time, just world of global business. Moreover, in case the local company moves forward using new technological solutions as well as approaches to running its business, this company has high chances to expand its market share selling products abroad. And according to UNCTAD, "...the trade integration process of the last three decades has created vast opportunities for countries to enhance and implement their economic and social development strategies." [8, p.14]. Consequently, governments should implement and enforce open trade policies while granting support in form of different resources (not only financial ones) to local firms for their development.

As the latest trends in international trade show,

- 1) cybersecurity is crucial for ensuring trust between a company and its customers, suppliers and partners locally and worldwide,
- 2) artificial intelligence is becoming more and more widespread in global trade, mainly because of its analysis of metrics and optimization of inventory management,
- 3) the appeal of cryptocurrencies has faded due to their high level of volatility, thus, it is not expected to accept cryptocurencies for purposes of international trade widely in the near future [1].

One solution for elevation of transparency and trust within the companies conducting international trade as well as for these companies interacting with other parties, – is the implementation of blockchain. And when the technology of blockchain has received much positive feedback and ideas for its further implementation so far, the future of cryptocurrencies in global trade operations is under debate. So will cryptocurrency reshape the future of international trade or will it stay away from it?

Blockchain Opportunities for Global Trade

First created by Satoshi Nakamoto in 2008, blockhain has revolutionized modern world. Technically speaking, it is just one type of distributed ledger technology. In simple terms, blockchain may be defined as "...Distributed, immutable databases that are technological infrastructure." [3, p.185].

As Garzik and Donnelly state, blockchain has 9 factors which are important to comprehend regarding it (Fig. 1). Among these factors are trust shifting, decentralization, machine-to-machine automation, cryptography / public-key infrastructure (PKI), permissionless, validity, immutability, uniqueness, and authentication [3, p.185-186].

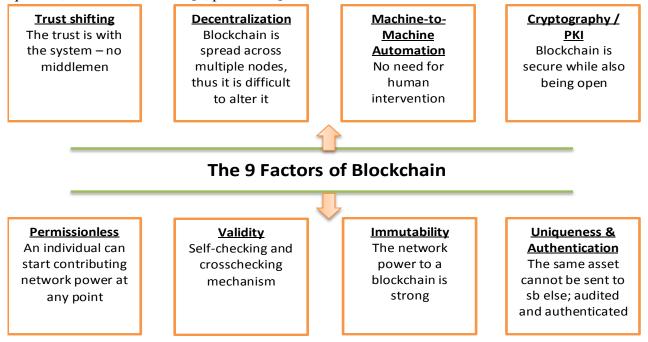


Figure 1. The 9 Factors of Blockchain

Source: developed by the author based on [3, p.185-186]

Given the possibilities of blockchain, it is evident the technology finds its application in many spheres, including international trade where according to Ganne, blockchain

- a) enhances trust along with transparency in value chains,
- b) makes trade costs reduced,
- c) provides opportunities for micro, small and medium-sized enterprises and small producers from economically developing countries [2].

Undoubtedly, blockchain can help companies from developing countries to participate in global trade, especially because it makes trade costs lower – thus, it alleviates the entry to a new market or company's market share expansion. Taking blockchain opportunities into consideration, it is vital to

understand that the digital gap is still here. So, the access to the Internet is significant while relying on this technology.

Again, there are issues needed to be addressed first and foremost discussing the implementation of blockchain in international trade. For example, customs procedures and government procurement are those two areas where blockchain should be implemented as soon as possible since it is here to make corruption impossible benefiting for all the society.

Does Cryptocurrency Have a Future in International Trade?

Such a financial instrument as a cryptocurrency appeared along with blockchain. Being present in the world for more than 10 years, cryptocurrencies have not received legal recognition in all countries yet. However, it does not mean they do not spark the interest from central banks and governmental authorities.

The benefits of cryptocurrency for international trade include

- a) a lack of exchange rate in case the parties use the same cryptocurrency,
- b) fast money movement since the transactions are super-fast (yet there are some technical issues which depend on network features),
- c) payments are secured because users should have their money available upfront,
- d) lower taxes and fees transaction fees are insignificant and few countries impose taxes on cryptocurrencies,
- e) detailed records are stored on blockchain,
- f) more savings and profitability options [6, 7].

Furthermore, when a country faces sanctions, the need for the use of cryptocurrencies in international trade becomes several times higher. In January 2019, Iran negotiated with 8 other countries to execute financial transactions in cryptocurrencies. The Central Bank of Iran published its draft framework dedicated to regulation of such virtual currencies, however, inside the country the use of them is still under restrictions [4].

Conclusions

All thing considered, it can be stated that blockchain is a novelty which already becomes our present. And everyone agree on that mentioning not only international trade. But as far as cryptocurrencies concerned, the things are not so straightforward. Here, the main barrier is their volatility and not legally recognized status. Too much risk for all parties. But the world is dynamic, so we will see what the time ahead brings us very soon. And, very likely, the future of international trade will be shaped by these a little bit underestimated financial instruments.

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