# JUSTICE AND LEGAL CERTAINTY IN REGULATING CRYPTOCURRENCY IN MALAYSIA

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#### **Abstract**

Cryptocurrencies have received important attention as alternative mediums of exchange that can complement or even replace traditional ones. For this reason, cryptocurrencies have become an attractive investment vehicle with a constantly growing market cap. Cryptocurrencies' role and economic impact cannot be concluded further than just a disruptive technology to the conventional financial system. The unstable and highly speculative value fluctuations coupled with a relatively new technological system have resulted in a lack of research to predict the future cryptocurrency market development. The research method used in this legal research is the juridical-normative method. The juridical-normative method is intended to seek or find rules, principles, and legal doctrines, which are then applied to analyze a phenomenon that is a legal subject. The presence of cryptocurrency has its own impact on social life. These impacts stem from the main feature of cryptocurrencies, the blockchain. Blockchain offers a revolution in the paradigm of the financial system, which was initially centered on the existence of central authorities such as governments and banks to become user-centered or user-centered. In addition, the philosophical values applied in cryptocurrency and blockchain reflect ideas that are synonymous with the collegial collective spirit, such as decentralization, transparency, equality, and accountability.

Keywords: cryptocurrency, Bitcoin, business law, economy, Malaysia

## Abstrak

Mata uang kripto telah mendapat perhatian penting sebagai media pertukaran alternatif yang dapat melengkapi atau bahkan menggantikan yang tradisional. Karena alasan ini, Mata uang kripto telah menjadi sarana investasi yang menarik dengan kapitalisasi pasar yang terus berkembang. Untuk saat ini, peran dan dampak ekonomi dari Mata uang kripto tidak dapat disimpulkan lebih jauh dari sekadar teknologi yang mengganggu sistem keuangan konvensional. Fluktuasi nilai yang tidak stabil dan sangat spekulatif ditambah dengan sistem teknologi yang relatif baru mengakibatkan kurangnya penelitian untuk memprediksi perkembangan pasar Mata uang kripto di masa depan. Metode penelitian yang digunakan dalam penelitian hukum ini adalah metode yuridis normatif. Metode yuridis-normatif dimaksudkan untuk mencari atau menemukan kaidah, asas dan doktrin hukum yang kemudian diterapkan untuk menganalisis suatu fenomena yang menjadi subjek hukum. Kehadiran cryptocurrency memiliki dampak tersendiri dalam kehidupan sosial. Dampak ini berasal dari fitur utama Mata uang kripto, blockchain. Blockchain menawarkan revolusi paradigma sistem keuangan yang awalnya berpusat pada keberadaan otoritas pusat seperti pemerintah dan bank menjadi user-centered atau berpusat pada pengguna. Selain itu, nilai-nilai filosofis yang diterapkan dalam cryptocurrency dan blockchain mencerminkan ide-ide yang identik dengan semangat kolektif kolegial seperti desentralisasi, transparansi, kesetaraan, dan akuntabilitas.

Kata kunci: Mata uang kripto, Bitcoin, Hukum, Ekonomi, Malaysia

#### A. Introduction

Cryptocurrency has recently become one of the most trending topics in economics and finance, including in Malaysia.1 Since the Dotcom crisis, commerce on the internet has increased tremendously, and the retail industry has revolutionized as internet sales exploded with more and more consumers shopping online.<sup>2</sup> Until the birth of the first cryptocurrency, Bitcoin, in 2009, online trading was mediated by financial institutions that functioned as trusted third parties to process electronic payments. While this system is good enough for most transactions, turnaround is very slow due to financial institution controls (privacy and trust issues) and costs.3

Cryptocurrencies have received important attention as alternative mediums of exchange that can complement or even replace traditional ones and it challenges real currency such as Malaysian ringgit and Indonesian rupiah. For this reason, cryptocurrencies have become an attractive investment vehicle with a constantly growing market cap. Given its price volatility, the Bitcoin network has spawned a variety of start-ups and attracted a huge influx of venture capital.<sup>4</sup>

The discovery of bitcoin appears not to seem without a clear basis for problems to be answered. Nakamoto identified two main problems indicating that the conventional banking system is no longer relevant. The first problem is the lack of trust between the transacting parties. The factors for lack of trust are very diverse in terms of physical (distance and location) and non-physical (attitude and behavior problems, lack of knowledge of the opponent's background, and others). It indicates that trust is an abstract thing whose

utility is very limited, and its fulfillment is difficult to achieve.

The second problem is the absolute intermediary interventions of financial institutions, which are too strong and tend to be authoritarian in interfering in private transactions. Financial intermediaries are always present at every moment of a money transfer, often without considering the freedom of the transacting parties to choose aliases by force. Examples of this form of financial intermediary are banks, credit institutions, and other institutions responsible for regulating and providing oversight in every economic activity. Nakamoto argues that the presence of financial intermediaries is often detrimental to society because it consumes unwanted, and often excessive, time and costs that the transacting parties inevitably bear.<sup>5</sup>

limitations Seeing the of the conventional financial system through banking intermediaries, Nakamoto argues that the era of the intermediary financial system is outdated and must be replaced. Nakamoto offers a solution by building networks where trust is no longer used. This network is a blockchain, which is a financial system that resembles a "ledger-based system" where all transactions are carried out without intermediaries (peer-topeer) and are directly recorded in this "ledger." Instead of financial intermediaries to ensure transaction security, every recorded transaction will be documented through a series of complex digital codes, which are guaranteed to be fast and without errors or misuse. From this network, the units of value transactions are called Bitcoins. Through blockchain and Bitcoin, Nakamoto has created an alternative financial technology that is successful in solving deadlock problems caused by fraud-

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<sup>&</sup>lt;sup>2</sup> Yhlas Sovbetov. "Factors Influencing Cryptocurrency Prices: Evidence fom Bitcoin, Ethereum, Dash, Litcoin, and Monero." *Journal of Economics and Financial Analysis* 2, no. 2 (2018); Jaysing Bhosale, and Sushil Mavale. "Volatility of select crypto-currencies: A comparison of Bitcoin, Ethereum and Litecoin." *Annu. Res. J. SCMS, Pune* 6 (2018); Angelo Corelli.

<sup>&</sup>quot;Cryptocurrencies and exchange rates: A relationship and causality analysis." *Risks* 6, no. 4 (2018): 111.

<sup>&</sup>lt;sup>3</sup> Dimaz Ankaa Wijaya. *Mengenal Bitcoin dan Cryptocurrency*. Puspantara, 2016.

<sup>&</sup>lt;sup>4</sup> Posma Sariguna Johnson Kennedy, and Alvani Amaerita Harefa. "The Financial Technology, Regulation and Banking Adaptation In Indonesia." *Fundamental Management Journal* 3, no. 1 (2018): 1-11.

<sup>&</sup>lt;sup>5</sup> Dimaz Ankaa Wijaya. *Op Cit.*,

prone financial intermediary systems and can also directly bridge producers and consumers.<sup>6</sup>

The discovery of Bitcoin has stimulated the development of financial technology to move forward. The success of bitcoin has led to the emergence of competing cryptocurrency brands in the market; these products are called "altcoins." Examples of altcoins include Ethereum, Litecoin, Namecoin, Peercoin, EOS, and Cardano. As of early 2019, thousands of cryptocurrency brands are circulating in the digital market with an aggregate value of more than 120 billion US dollars.

Bitcoin network promises The substantial efficiency gains (e.g., low costs) compared to paper money-based digital payment systems. Furthermore, due to its open and agnostic nature, the Bitcoin protocol embodies the ability to support independent innovation. For example, Bitcoin development is free to introduce innovative applications to augment the Bitcoin network without thirdparty intervention. In this sense, Bitcoin and the underlying blockchain technology are capable of overcoming market-disrupting capabilities.<sup>7</sup>

Cryptocurrency is a new breakthrough in the development of the financial world in the era of modern technology. Although the development of cryptocurrencies is a disruptive innovation to the conventional financial system, it does not mean that cryptocurrencies have surpassed or replaced "money" itself. Virtual currency is a type of digital payment medium whose economic value does not depend on the general banking system as the central financial authority. On the other hand, virtual currency's economic value and transaction procedures can only be determined, used, and accepted by the

developer or by consensus (agreement) from the members of the virtual community who use it. Virtual currency is a decentralized currency that does not involve a third party (trustee) to secure transactions but rather propagates through peer-to-peer transactions. Due to their pure and equal collective function, virtual currency has a high use value but only for those who recognize and use it. It does not mean that the virtual currency market cannot develop. Along with the internet world that is always evolving with fluid boundaries, the population of virtual currency users is also increasing, and the value of the currency will be higher. Bitcoin is one of the most common examples of virtual currency.8

### **B.** Research Method

The research method used in this legal research is the juridical-normative method. The juridical-normative method is intended to seek or find rules, principles and legal doctrines which are then applied to analyze a phenomenon that is a legal subject. The result of normative legal research is the novelty of a theory, argument, or legal concept as a solution to solving a legal problem. A problem is examined or studied from legal sources, namely statutory regulations, jurisprudence, as well as theoretical sources from legal experts. These consequences are in the ontological, epistemological, and axiological aspects. Epistemologically, normative legal research in dissertation must be hermeneutic, argumentative, logical, and normative through the concept of economic analysis of law or economic analysis of law. Axiologically, the form of research results from this dissertation is prescriptive or in the form of proposals, references, or recommendations.<sup>9</sup>

<sup>&</sup>lt;sup>6</sup> Nathaniel Popper. *Decoding the enigma of Satoshi Nakamoto and the birth of Bitcoin*. New York Times, 2015.

<sup>&</sup>lt;sup>7</sup> Clayton M. Christensen, and Joseph L. Bower. "Customer power, strategic investment, and the failure of leading firms." *Strategic management journal* 17, no. 3 (1996): 197-218; Manish K. Srivastava, and Devi R. Gnyawali. "When do relational resources matter? Leveraging portfolio technological resources for breakthrough innovation." *Academy of Management Journal* 54, no. 4 (2011): 797-810.

<sup>&</sup>lt;sup>8</sup> Arvind Narayanan, Joseph Bonneau, Edward Felten, Andrew Miller, and Steven Goldfeder. *Bitcoin and cryptocurrency technologies: a comprehensive introduction*. Princeton University Press, 2016.; Lewis, Antony. *The basics of bitcoins and blockchains: an introduction to cryptocurrencies and the technology that powers them*. Mango Media Inc., 2018.

<sup>&</sup>lt;sup>9</sup> Zainal Asikin. *Pengantar metode penelitian hukum*. Jakarta: Raja Grafindo, 2016; Soejono Soekanto. *Metode penelitian hukum*. Jakarta: Rineka Cipta, 2003.

#### C. Result and Discussion

Economics provides scientific theories to predict the effects of legal sanctions on behavior. To economists, sanctions look like prices, and perhaps people are law-abiding because they see how much they pay. People respond to higher prices by consuming less of the more expensive item, perhaps, people also respond to tougher legal sanctions by doing less of the sanctioned activity.<sup>10</sup>

Economics has appropriate mathematical theories (price theory and game theory) and empirical methods (statistics and econometrics) to analyze the impact of implicit prices attached to behavior. For example, suppose the producer knows that sometimes his product will hurt the consumer. A question can be raised, namely how safe will he make the product. For companies seeking to maximize profits, the answer depends on three costs:<sup>11</sup>

- 1) The cost of making a safer product, depending on the design and manufacture;
- 2) Manufacturer's legal liability for consumer injury; and
- 3) The extent to which the injury discourages consumers from buying their product.

Profit-maximizing firms will adjust security levels until the additional safety costs match or equal the benefits minus the responsibilities and changes in consumer demand for their products. **Economics** generally provides behavioral theories to predict how people respond to laws. This theory goes beyond intuition, just as science goes beyond common sense. feedback is always relevant for making, revising, canceling, and interpreting laws. A famous essay in law and economics describes the law as a cathedral—a large, ancient, mysterious, intricate, beautiful, sacred building. Knowledge of the theory of behavior resembles a mortar between cathedral stones, which supports the whole structure.<sup>12</sup>

Approaches based on economic behavior will help the law with its three functions, namely, positive, prescriptive and normative.<sup>13</sup> The Positive task, which is primarily for the economic analysis of law and is an emphasis here, is to explain the effects and content of law. How the law will affect human behavior, what are the possible responses of individuals to changes in the rules, and why the law has changed in such a way. A deep understanding of human behavior will increase the credibility of answers to such questions. Second, the prescriptive task is to see how the law can be used to achieve the specified goals, such as preventing unwanted behavior in society. Third, the normative task is to assess more broadly the end of the legal system. In conventional economic analysis, normative analysis is no different from prescriptive analysis, because the goal of the legal system is to maximize social welfare. But from a behavioral economic perspective, the end of the legal system is more complex because everyone has different preferences. The priority is to see the patterns that occur in society.

The concept of man as the rational maximizer of his interests implies that people respond to gain- if a person's environment changes in such a way that he can increase his satisfaction by changing his behavior, then he will. From this proposition, three basic principles of economics are derived: 14

1) The first is the inverse relationship between the price charged and the quantity demanded. If the price of steak goes up 10 cents, and the price of the other item doesn't go up, then the steak is more expensive than the other item, or at least more expensive than it was before. If a person is rational, then he will react by

<sup>&</sup>lt;sup>10</sup> Arvind Narayanan, *Op Cit.*,; Asli Ozpolat, Gulsum Gunbala Guven, Ferda Nakipoglu Ozsoy, and Ayse Bahar. "Does rule of law affect economic growth positively." *Research in World Economy* 7, no. 1 (2016): 107.

<sup>&</sup>lt;sup>11</sup>Loc. Cit.

<sup>&</sup>lt;sup>12</sup> Guido Calabresi and A. Douglas Melamed. Property Rules, Liability Rules, and Inalienability: One View of the Cathedral. *Harvard Law Review*, 85, 1972.

 <sup>13</sup> Christine Jolls, Cass R. Sunstein, and Richard Thaler.
"A behavioral approach to law and economics." Stanford Law Review. 50 (1997): 1471.

<sup>&</sup>lt;sup>14</sup> Richard Posner. *Economic Analysis of Law*. New York: Wolters Kluwer Law & Business, 1986.

looking for a substitute even though the item is less to his liking than steak. The items he used to dislike were now more attractive because they were cheaper than steaks. Some other consumers will continue to buy steak even though the price has increased, because the substitute is not worth the steak. Among consumers who continue to buy steak, there are consumers who reduce the amount of their purchases.

- 2) Consumers—in the example above—try to maximize their utility (happiness, pleasure and satisfaction).
- 3) The third principle is that resources tend to gravitate toward their most valuable use if voluntary exchange (barter) is permitted. For example, Farmer A offers to buy Farm B at a price higher than its market value. It can be interpreted that Farm B has more value for A than for B. By owning Farm B, Farmer A can produce output that is more valuable measured by the price that consumers are willing to pay.

The economic theory of law is the most promising theory of extant legal theory. Anthropologists, sociologists, psychologists, political scientists, and other social scientists also make analyzes of the legal system, but their work so far is not rich enough in theoretical or empirical content to compete seriously with the work of economists.<sup>15</sup> Using an economic approach to legal analysis, two basic questions about law are addressed. The first is descriptive in nature, namely about the effects of the rule of law, the second is normative, which is related to social desires for the rule of law. 16 The economic analysis of law, which was pioneered by Richard Posner, has two main bases, namely the theory of property rights and transaction costs.<sup>17</sup> This analysis is an interesting as well as challenging attempt to use the concepts and methods of modern economic reasoning to gain a deeper understanding of legal issues. 18

<sup>17</sup> Klaus Mathis. Efficiency Instead of Justice? Searching for the Philosophical Foundations of the Economic Analysis of Law. Lucerne; Springer, 2008. <sup>18</sup> Ibid.,

<sup>15</sup>*Ibid.*,

The existence of cryptocurrencies in the global financial world creates a disruptive wave of conventional financial systems. On the one hand, cryptocurrencies get rid of the role of third-party authorities to regulate an economic process and transactions. But on the other hand, there is a financial element that is most significantly affected by the disruptive impact of cryptocurrencies, namely money or means of payment (legal tender). In the conventional financial system, the form of payment instrument that is universally recognized is fiat currency, where the determination of production, circulation, and speculation is regulated and determined by government authorities, a common example is paper money. Cryptocurrencies raise new issues for debate in terms of legal tender. Fundamentally, cryptocurrencies are different fiat money. Cryptocurrencies produced like gold - by being mined - but treated and spread on the market like money. Due to their limited supply, the value of cryptocurrencies can increase as they become scarce. The nature of this cryptocurrency is different from fiat money which can be produced indefinitely but is at risk of inflation and loses significant economic value. In addition, cryptocurrencies can only accessed and used digitally, where the facility to access the internet network is not evenly distributed to everyone. Unfortunately, there is no solution that can bridge this problem, with the example of converting it into physical money, without risking the anonymity and independence of cryptocurrencies financial authorities.

For now, cryptocurrencies' role and economic impact cannot be concluded further than just a disruptive technology to the conventional financial system. The unstable and highly speculative value fluctuations coupled with a relatively new technological system have resulted in a lack of research to predict the future cryptocurrency market development. Some economists speculate that the duality of cryptocurrencies as a limited

<sup>&</sup>lt;sup>16</sup> Steven Shavell. *Foundation od Economic Analysis of Law*. Massachautes: Harvard University Press, 2004.

medium of exchange like gold but speculative like currency can be analyzed through a supply and demand theory approach. This theory sees the economic role of cryptocurrencies as more of a digital asset than a virtual currency. However, this view is at risk of causing investors' expectations of cryptocurrencies to become more speculative due to the positive feedback mechanism where positive market expectations that reinforce each other can result in an increase in speculation in the price of an item to an unreasonable level. This has the risk of causing a price bubble which will lead to a drastic decrease in the total value of the item to the point that it is not even worth it at all.

#### **D.** Conclusion

The presence of cryptocurrency has its own impact on social life. These impacts stem from the main feature of cryptocurrencies, the blockchain. Blockchain offers a revolution in the paradigm of the financial system, which was initially centered on the existence of central authorities such as governments and banks to become user-centered or usercentered. In addition, the philosophical values applied in cryptocurrency and blockchain reflect ideas that are synonymous with the collective collegial spirit, decentralization, transparency, equality, and accountability. Decentralization means the transfer of the center of power from a central authority to a collective authority, such as community consensus. Transparency means freedom to access all information needed in a social interaction or financial transaction. Equality is non-discriminatory treatment from the system and community to each entity to participate in economic activities. And accountability is the obligation of every community member to account for every action and decision taken and the resulting impact. However, the application of these values creates potentials that are like a double-edged sword.

On the one hand, the wise use of cryptocurrencies can advance the system of protecting human rights, such as freedom of expression and privacy, while enforcing social norms to be transparent and accountable in a But community. on the other cryptocurrencies can be misused to hide traces of criminal activity or even as a tool of dictatorial rulers who want to undermine the freedom and rights of certain groups. Cryptocurrency relations in social life are not solely one-sided. The social system in a society can also affect the economic activity of cryptocurrencies. It is due to the speculative nature of the market on the economic value of cryptocurrencies. Thus, fluctuations conflicts social issues involving and cryptocurrencies can affect cryptocurrency price speculation in the market, either directly or indirectly.

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