THE EXTRA-LEGAL PROPERTY RIGHTS DESIGN OF BITCOIN AND ITS PHILOSOPHICAL ISSUES

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Abstract

This article provides a philosophical examination of the Bitcoin concept of property rights protection. To that end, several fundamental questions must be addressed on the subject, including what money is, what purpose it seeks to serve, and how the system that supports it is related to the concept of property rights. Finally, it is important to identity what, if anything, Bitcoin has to offer in these matters. This article concludes that the primary function of money as a social institution is to store one’s labour as part of one’s property right. In comparison to fiat currency, Bitcoin is the superior medium of exchange. However, the ideological foundation of Bitcoin has philosophical issues: it is based on the false premises of absolute individual property rights derived from the concept of natural rights, which is incompatible with Indonesia’s economic commitment and goals of establishing a welfare state, as reflected in the constitution.

Keywords: bitcoin, constitutional law, fiat currency, philosophy, property rights

I. INTRODUCTION

The emergence and growth of Bitcoin have given rise to a new narrative about Bitcoin as a disruptive innovation with the potential of serving as the foundation for a new non-intermediary financial system.\textsuperscript{1} The decentralised nature of bitcoin brings privacy in the financial sector to the next level. The feature of recording every transaction history on the mining system removes the necessity for the third-party intermediaries, challenging the current exclusivity of widely used fiat currency. Satoshi Nakamoto, the father of Bitcoin, explained that the creation of Bitcoin was a response to the failure of the centralised-managed fiat currency during the 2008 financial crisis.\textsuperscript{2}


The narratives on replacing fiat currency with Bitcoin\(^3\) find their root in Hayek’s long-disclosed idea of competitive currency.\(^4\) Furthermore, Bitcoin is considered to have sufficient quality of serving as a functioning currency relative to its fiat counterparts, such as faster transaction speed, better privacy, and fixed supply, endowing Bitcoin with the quality of absolute scarcity. That specific characteristic of absolute scarcity put Bitcoin believed as the most inflation-resistant currency in the long run.\(^5\)

Satoshi Nakamoto expressed quite strong concern in the white paper regarding property rights and how the state’s centralised control over currency currently threatens it. Satoshi’s concerns are reflected on the Bitcoin’s extra-legal property rights protection mechanism. This article will look at what kind of financial system the “idea of Bitcoin” has to offer and how it will affect property rights protection. To further enrich the discussion, this article provides criticism, which is mainly based on the spirit of the Indonesian constitution and its commitment to the welfare state. As opposed to a positive constitutional legal study, the discussion in this article is presented under the theoretical constitutional law perspective, which provides a more abstract and philosophical approach to constitutional issues beyond the plain text of the constitution.\(^6\)

This article does not go into detail about the “practical”\(^7\) advantages or disadvantages of Bitcoin vs. fiat currency. Instead, the focus is on the theoretical and ideological promise of the bitcoin system. To that end, this article sought to answer several fundamental questions about the subject: what is money? What purpose does it seek to fulfil? How the system that supports it is related to the concept of property rights? What does the Bitcoin system have to offer in regards of these issues?

II. BITCOIN: THE BETTER MONEY?
Is it true that Bitcoin is the superior money? As mentioned before, to answer that question, we first need to define what money is and what function it serves? Economists, in general, would offer three functions of money as an answer, stating that money is an instrument of a store of value, a medium of exchange, and:

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\(^4\) Appukuttan Nair, “The Bitcoin Innovation, Crypto Currencies and the Leviathan.”


\(^6\) such as the nature of power, sovereignty, social contract, institution, et cetera, that made up the whole political structure reflected on both written and unwritten constitution.

\(^7\) The problems with how the Bitcoin system is delivered/implemented outside the system on a practical level, as opposed to “the system itself.”
and a unit of account. However, what does that really mean? To comprehend the matter, we need to start the discussion at the very fundamental level, the nature of money.

II.A. On The Nature of Money and Labour

Money is a social institution. It represents an extension of very complex patterns of human activity and relationships. Like other social institutions, money emerges as a product of mutual agreement that helps guide society. To understand money is to understand the social institution itself. On that matter, the Hobbesian contractarianism theory serves as the best tool. Even if it is not very successful at providing an accurate historical explanation, it provides the closest framework to the current scientific findings and a useful interpretation regarding the origins of social institutions. Furthermore, the contractarianism perspective is generally the easiest to understand and contextualise from the constitutional law perspective.

In short, Hobbes opined that in the state of nature, humans do not live civilised lives. Therefore, current social institutions (such as morals, law, and economy) are either non-existent or very minimal. Practically, there are no rules or customs whatsoever. Hobbes depicts the state of nature as brutal; a condition where humans are free to do anything they see fit, including killing and hurting other humans. Social institutions formed gradually based on the impracticality of that kind of lifestyle as humans began to live in cities.

Hobbes stated that human beings by nature are selfish and rational, motivated the basic interest of survival. The synergy of human nature and its impulse of self-preservation is the guiding force for humans to create social institutions. Even though humans are, in principle, free to kill and steal, they tend to avoid such behaviour. As a rational-beings, humans can learn from experience, calculate, and make rational decisions. Human rationality enables human beings to comprehend that coercive action aimed toward others will likely end up in conflict, a situation that would put them in the danger of physical conflict and therefore expose them to the possibility of death or injury.

On the other side, as selfish beings, humans tend to prioritise themselves over another. The selfish nature of humans is the rationale for avoiding such risks.\textsuperscript{12}

Therefore, humans can comprehend that violence is an unfavourable action relative to, for example, transactions—thus, it becomes the origin of morality and economy as a social institution. From a scientific perspective, humans are the result of millions of years of evolution guided by natural selection. The theory’s basic premise is that the species with the most advantageous traits are selected to survive and pass on their genes.\textsuperscript{13} Human evolutionary history led to it being a species with a group style of living (as opposed to solitary) as it happened to be best suited for humans.\textsuperscript{14}

Evolution occurs at the species level but has consequences at an individual level. As a result, individuals possess traits compatible living in groups and have higher survivability. Traits that contribute to a group’s cohesiveness and harmony have become the most favourable traits, thus becoming the most common. By traits, we refer not only to the physical characteristics of a species but also to its mental and cognitive traits that precede certain behavioural patterns. The human cognitive arrangement is directed toward social traits such as empathy, altruism, and collaboration.\textsuperscript{15} It is these impulses that allow the formation of

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“a complex of positions, roles, norms and values lodged in particular types of social structures and organising relatively stable patterns of human activity with respect to fundamental problems in producing life-sustaining resources, in reproducing individuals, and in sustaining viable societal structures within a given environment.”\textsuperscript{16}
\end{quote}

Accordingly, from a scientific perspective, social institutions are a mere product of evolution that emerges as the impetus for survival. Unlike most social institutions, money is not only a product of human-to-human interaction, as human life can be seen not only in a social context but also in

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the spatial context of its position and relation to the surrounding environment. As explained by George Simmel, the existence of a natural entity and all its diversity stands in the single uniform law of existence. The natural entity is just an ordinary, mechanical, physical landscape that is empty and meaningless. George describes it with these words, ‘Their equality before the law of nature, the constant sum of matter and energy, the convertibility of the most diverse phenomena into one another, transform the differences that are apparent at first sight into a general affinity, a universal equality.’

The neutral and equal nature of the natural beings is then perceived in infinite ways. This is because, from an evolutionary perspective, almost every organism has some degree of sensitivity to its environmental conditions. The environment is a sequence of processes that gradually change from one state to another. Changing environmental conditions can be a drawback for any organism. Therefore, the ability to respond to the changing environment is a trait that every organism must possess in order to survive. Sensitivity to the surrounding environment is an instrument that enables this responsive capacity. The human mind does not perceive the reality of nature as a passive mirror. Instead, we perceive objective reality and arrange the contents of that reality in an orderly manner by placing us in the trap of the world of values—a world that is only real in the human mind.

In that way, humans attach value to natural reality, ordering each component of nature in a classification where some components are more valuable. This process of sorting things in a hierarchical order of importance is what enables the cognitive process of valuation. Valuation helps humans make rational decisions. Choices that increase survivability, well-being, or even avoid suffering will naturally appear more valuable in this cognitive hierarchy. Valuation creates an illusion of priority, making the decision-making process possible. According to Simmel, the valuation process is based on the distance between the subject as the desirer and the object of desire. The distance here refers to the wide chasm that exists between the subject and the object;

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18 Ibid., 56.
22 Ibid., 56.
23 Ibid., 57.
it can be an effort that must be made, a cost that must be paid, or the object’s scarcity.24

Objects are not difficult to acquire because they are valuable, but we call those objects valuable that resist our desire to possess them. Since the desire encounters resistance and frustration, the objects gain a significance that would never have been attributed to them by an unchecked will.25

Labour reduces the distance between the desirer and the object of desire and doing labour means allocating a portion of our extremely limited lifetime; thus, labour is the source of value realisation as well as being the cost of an object/service.26 For simplicity, labour can also be defined as the activity of creating valuable goods and services.27 The emergence of the first agricultural revolution, transitioning the hunting-gathering lifestyle to farming. Humans no longer spend their time gathering food, allowing them to conduct other activities and encouraging the division of labour.28 Individual humans ceased to produce all their individual needs by themselves as they began to specialise in producing specific goods/services. Transactions are required in that type of society. Unfortunately, transactions are not simple matters because each good and service has a different value compared to other goods and services. Transactions involving two objects are rendered impractical. If X wants Yx, things owned by Y, but Y does not want X’s objects or services, then X must exchange the things X owns with someone who has the things Y wants to be exchanged so that all parties agree to the exchange.29

To overcome these difficulties, humans developed an institution called money. In this sense, money is a tool for determining the worth of labour. Money is an abstract value in and of itself. It is the physical object that embodies abstract economic value. The mutual relationship of an entity’s exchangeability constitutes its economic value. Money is an attempt to create an instrument that functions independently as an expression of that relationship. An object’s monetary value is simply an indication of its degree of exchangeability compared with other commodities.30

24 Ibid., 63-69.
25 Ibid., 64.
30 Ibid., 118-119.
By assigning value to money and using money to measure labour’s value, we have created technology allowing us to store the value we create through the creative process of labour. Money also allows us to measure a product’s and service’s value, makes exchange easier, and keeps economic institutions running. By storing value in money, that value can be transferred in space (moved) and time (saved). This is what makes money a social institution closely related to fundamental human rights including property rights. Money represents the value earned by a person using their limited lifetime and labour to provide goods and services to society. Money does not refer to the physical object of gold or paper but rather to what we collectively assign to it; the value represented by these objects and the whole relationship behind them. When we use gold or paper as money, gold remains a bar of gold, and paper remains a piece of paper. Its substantial nature remains unchanged. People never want paper or a bar of gold as physical objects; what they want is a cognitive experience of what they can get with those two things—purchasing power. Money was never an object of desire; its nature is relational rather than existential.

Money represents a person’s portion of ownership of all goods and services in the world. Money can be exchanged for existing goods and services as objects representing our share of ownership of all goods and services, depending on how large of a portion we possess of the aggregate of available goods and services. The most fundamental goal of money is to create a store of value and medium of exchange; both qualities are interconnected and embodied in money as a social institution. Store of value means that the value of money does not depreciate over time. The purchasing power of money must retain over two points of time. That is very fundamental because it is part of the property right. A medium of exchange means many people accept it as a medium of exchange for goods and services. Meanwhile, money as a unit of the account rests on the primary function of money as a store of value. When money functions properly at retaining its value across time and space, it obtains the ability to price a product of labour accurately. When money does not retain value, anything it represents is distorted.

II.B. Property Rights Protection: Bitcoin Vs. Fiat Currency
As a technology, the essence of money preceded its existence. Any type of money can be judged by how well the system serves its primary and fundamental functions. Throughout history, humans have utilised a variety of currencies,

31 Cermak, “Can Bitcoin Become a Viable Alternative to Fiat Currencies?” 19
including salt, glass, and shells. Gold has been used as money for the longest time in human history of all these technologies. Gold has served as a good store of value as its rarity and the difficulty of the mining process increase the gold supply steadily and is very good at retaining its value over time. The most basic drawback of gold is its metallic nature. Indeed, gold’s effectiveness as a medium of exchange is subject to a geographical obstacle. The greater the number of transactions and the farther the distance between the transacting parties, the more ineffective and insecure gold is.

This situation encouraged the development of the first bank. Banks assist people in storing their gold in exchange for banknotes, which serve as proof of ownership of a specific amount of gold stored in the bank. For centuries, world currencies have been redeemable in gold. Because they represent gold, the banknotes issued also have value. Transactions in large quantities and over long distances no longer used gold. Rather, people started using banknotes that are easier to carry with minimal transportation and security costs. This practice changed along with the development of the fractional reserve banking system in which banks would lend their stored gold, causing the number of banknotes in circulation to no longer represent the amount of gold stored by banks. Fractional reserve banking became a practice that lasted until it entered the gold standard period, which introduced the concept of gold-backed paper money. When the practice of fractional reserve banking became more massive, financial problems arose. When customers are about to withdraw money, the bank must transfer gold from another bank, which would repeat the original problem of gold, for large transactions.

Due to this problem, a central bank was formed as a place where banks would deposit their gold. Under the gold standard, where gold represented money in circulation, is kept in one place, while interbank transfers are simply done with banknotes from the central bank. That is the beginning of the

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35 Ibid., 231.
state’s intervention into the money supply. The central bank would lend the

gold it held to the government to carry out government programs, wherein

the gold would be exchanged for IOUs, reducing the physical supply of gold
stored in the central bank. As a result, customers who wished to redeem their
banknotes for gold faced a problem, prompting the government to issue a
policy to delay the redeemability of banknotes to gold. At some point in our
history, the temporary delay in exchanging banknotes was made permanent.
This policy was pioneered in the United States during President Richard Nixon’s
administration. Although the new system solved many financial problems, it
also came with some significant drawbacks: money had lost its relationship
with gold.

Without the gold standard, fiat currency has no intrinsic value. The
credibility of fiat currency is based on state authority, as the name implies (fiat
means by decree). According to some experts, fiat money is valuable solely
because it is constantly demanded by the state, or in other words because it is
used as legal tender. Fiat money retains its value due to fiscal and monetary
policies overseen and enforced by the government and the central bank. As a
result, the state becomes the primary entity with the authority to create money.
In this regard, fiat money offers a financial system that can only be operated
through the legal system, which requires some sort of sovereign entity with
the power and the ability to use force. To put it in the perspective of property
rights, fiat currency established a method of protection of property rights that
is dependent on and can only be operated within and through the legal system.

The supply of fiat currency is unlimited, at least in principle. The value
of fiat currency is heavily reliant on the competence of the central banking
institution responsible for issuing, circulating, and regulating its supply and
demand. The central bank, as an institution, has the authority to circulate or
withdraw money from circulation in response to economic growth effectuating
monetary policy, which can range from qualitative easing to setting certain
interest rates.

The system’s most obvious vulnerability is that fiat currency is relatively
susceptible to inflation. Inflation itself is often defined as an increase in the
price of goods and services. Although not mistaken, this general definition

41 Senner and Sornette, “The Holy Grail of Crypto Currencies.”
43 Ibid.
44 Cermak, “Can Bitcoin Become a Viable Alternative to Fiat Currencies?”
45 Kuikka, “Can Cryptocurrency Come to Fulfil the Functions of Money? An Evaluation of Cryptocurrency as a Global Currency.”
does not fully capture the causes of inflation. The increase in the price of goods during inflation is mainly due to the reduced value of fiat money.\textsuperscript{46} The leading cause of inflation lies in the fact that fiat money is a debt-based currency. In the current monetary system, money can be created through issuance debt. When a commercial bank or government borrows money from the central bank, the central bank essentially “creates” money.\textsuperscript{47} The production and circulation of new money is referred to as monetary expansion, which can result in inflation over time. When a borrower repays a loan with the money, the expansion is readjusted. This entire cyclical process is mainly due to the government’s debt for spending. The money returned will cease to circulate, resulting in a monetary contraction and resulting deflation. Therefore, in essence, every loan is a debt that increases the money supply and will be repaid once the money is paid back.

When the economy slumps, banks will naturally withhold loans to avoid default, and more debt will be paid off than created, reducing the money supply and resulting in a monetary contraction. However, when the economy slumps, government program budgeting can expand to fund social programs, which, if not adequately funded through taxes, trigger new loans. On the other hand, the central bank lowers interest rates in order to ease the government’s ability to repay its debt, incentivising more borrowing. Finally, government spending increases the money supply. This combination creates an incentive for anyone who fully understands the economic situation to borrow increasing amounts of money because the value of the money borrowed will decrease due to the incoming monetary expansion. This vicious cycle causes the money supply to gradually increase.

Following this cycle, the increased supply of money in circulation will undoubtedly lead to a decrease in value. As a result of this decrease in value, the number of goods and services that can be purchased with money will decrease over time. People’s savings will gradually lose their value. Today’s money no longer represents the value of the labour a person as it did in the past. The amount of goods and services that can be exchanged today is less than what the community contributed to the past through labour and time allocation. As a result, property rights, one of the most fundamental rights, are violated. The current technological advancement supposed to increase the efficiency of production. This progress makes goods and services more plentiful and easier to obtain, not the other way around; yet prices are gradually increasing.


The irony is that labour is done using time which has absolute scarcity and cannot be reversed. A person has sacrificed their time to contribute to the creation of existing goods and services, but the value created by this process continues to diminish. This phenomenon will have the greatest impact on ordinary people. The creation of debt, however, does not immediately result in inflation as soon as the central bank issues money. Inflation occurs when the newly created money is increasingly the available money supply in circulation. In other words, the first hands, such as the government, large companies that apply for loans, and other parties surrounding it, continue to spend money at a value that has not yet been affected by inflation. However, as the money is spent and circulated further, the money supply increases, and the value of money decreases. Inflation occurs when money circulates in the hands of common folks, or over time, in the next generation. This phenomenon indirectly transfers value from common people, who are far from the creators of money to the first hands. There is no money transfer, but the purchasing power of money depreciates for these parties rather than those on the first step of circulation. Millions of hours of labour are slowly vanishing as a result.

This works is in stark contrast to what Bitcoin has to offer. Bitcoin attempts to establish an extra-legal property rights protection mechanism that can be applied outside the legal system, thus eliminating trust and dependence on sovereign entities and sovereign use of force. Bitcoin offers a financial system with a limited money supply. Satoshi Nakamoto limits the supply of Bitcoin to only 210,000,000, which must be obtained through the mining process. Mining is a decentralised activity of permanently recording and verifying transaction data into the blockchain. By relying on devices with certain computing power, miners try to verify distributed transactions made via Bitcoin by solving cryptographic mathematical problems. For every transaction verified this way, the recorded transaction data is permanently stored in the blockchain, and miners are rewarded with Bitcoins, thereby introducing new Bitcoins into the system.

All miners verify every transaction on Bitcoin, leaving no chance for counterfeiting or fraud within the system. There are, however, countless opportunities for fraud when using Bitcoin for purposes other than money (outside the system). Especially when it involves a third party which inherently contradicts the very fundamentals of Bitcoin philosophy as it was never designed to be a speculative asset that relied on a third party for its operation.

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50 Cermak, “Can Bitcoin Become a Viable Alternative to Fiat Currencies?” 8
For example, current cryptocurrency exchange hype treats Bitcoin as a speculative asset rather than its intended purpose as a store of value.

The more Bitcoins that are introduced into the system, the more difficult cryptographic problems that must be solved, so the more significant the computing power that must be provided by the miners, but on the other hand, the rewards given will also be less. The system was created to simulate the monetary creation of commodities such as gold. As a result, Bitcoin supporters often dub Bitcoin digital gold. Bitcoin’s decentralised nature also makes centralised regulation like the central bank model impossible. This begs the question of how significant are these differences in contributing to the ability of the two systems to fulfil their functions as money?

As previously stated, Bitcoin has a maximum limit on the amount that can be mined, making it primarily money with an absolute scarcity. Because of its scarce supply, Bitcoin cannot be inflated. The inflation rate of Bitcoin always decreases every four years and then deflates, which suggests that theoretically, it has a disinflationary nature. The current condition indeed shows Bitcoin as a highly volatile asset. In 2018 the price of Bitcoin fell by 65% in a single month. The price gradually recovered and then rose nearly 69% by 2020. Currently, according to Coindesk.com, the price of Bitcoin has dropped 54,45% in the last nine months. This characteristic alone makes Bitcoin currently not a good medium of exchange and unit of account. For example, most online merchants that accept Bitcoin as a means of payment will convert the prices to fiat currency immediately at the checkout. Some see those shortcomings in disqualifying Bitcoin as money.

Comparing Bitcoin with fiat currency is very difficult. Some are stuck in the “status quo bias.” Researchers are unable to make accurate comparisons between Bitcoin and fiat money due to such a bias. Most people are wary of comparing the ‘status quo of fiat currency vs bitcoin’ rather than evaluating the two currencies solely based on the mechanisms of the financial system offered by both currencies. However, if the comparison is made with this bias, fiat currency would always come out on top because fiat currency is currently widely used. On the other hand, Bitcoin will always lose because of its current limited use, relative novelty, and the fact that many people still do not understand how it works.

51 Appukuttan Nair, “The Bitcoin Innovation, Crypto Currencies and the Leviathan.” 3
53 Cermak, “Can Bitcoin Become a Viable Alternative to Fiat Currencies?” 8
56 Ibid., 18.
A fair comparison should not be based on “current conditions” but instead on a hypothetical perspective; if both are evaluated objectively, which one is better suited to fulfil its function as money? The comparison will then be solely based on the financial systems provided by the two types of “money.” For example, by comparing salt and gold incorrectly, a researcher is likely to conclude that salt is better money than gold, only if the study is conducted at a specific point in human history when the use of salt as currency was more common than gold. A fair and objective comparison can be made only by removing historical time as a variable.

However, the current condition of Bitcoin as an inadequate medium of exchange and unit of account does not mean it will never be one. The current high volatility of Bitcoin is caused by the fact that Bitcoin is not used as money—its intended purpose. Instead, it is mainly treated as a speculative investment. The phenomenon is criticised by a group committed to the true purpose of Bitcoin as a replacement for fiat currency, “the true Bitcoiners.” True Bitcoiners are concerned with Bitcoin’s future. They see people who use Bitcoin as a speculative asset are unaware of the modern financial system’s problems and how Bitcoin is intended to solve them. They believed that Bitcoin’s superior characteristics could enable it to replace fiat currency. Bitcoin’s volatility is primarily due to its limited market capitalisation, making it extremely sensitive to small price changes “(whale splashes).” Nonetheless, this volatility will gradually decrease in tandem with the increase in market capitalisation.

As stated by Robert Breedlove, one of the most prominent “true Bitcoiners” in an open letter criticising economist Ray Dalio, a currency should not be easy to generate; on the contrary, a currency should be difficult to generate. Because every increase in the amount of money in circulation will lower the currency’s value, money manufacturing activities must have a balanced degree of incentives and disincentives. A currency must have a high stock-to-flow ratio in order to be an adequate store of value. The term “stock” refers to the existing currency supply, whereas the term “flow” refers to the new supply. This quality refers to a cost or difficulty that must be paid or endured in order to generate money.

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59 Knittel and Wash. 5–6.
60 Ibid., 5.
Bitcoin miners are incentivised to keep increasing the supply of Bitcoin until the total cost of mining equals the total revenue derived therefrom. Money with this kind of character is perfect as a store of value considering that every new supply circulating means the value of the money will decrease. Bitcoin is one currency capable of fulfilling that goal. If the price of Bitcoin increases, the supply will increase because on the miner’s side, there would be incentives by the Bitcoin market prices to increase the investment in increased computing power. In return, it gradually reduces the stock-to-flow ratio. Such a system makes the value of money relatively more stable. Furthermore, the costs and risks of Bitcoin mining are a disincentive to increasing Bitcoin supply, which is then balanced by incentives in the form of its market prices. It can be said that Bitcoin mining has a balanced set of incentives and disincentives so that mismanagement or mistakes (such as overmining) in the production process would have a negative impact on the actors and therefore become a disincentive. A sound monetary system primarily includes incentives to motivate the system’s actors and disincentives if the actors make bad decisions.

The system’s function around fiat money is relatively weak. A central bank can cause monetary expansion. As previously stated, monetary expansion tends to distribute the value of productive actors who contribute to the economy through labour to the first holders of newly created money, such as the government. Parties that use early printed money continue to use money with high purchasing power, so they are relatively disconnected from the consequences of their policy choices. On the other hand, the parties who are far from the liquidity money faucet, as well as the next generation, will bear a significant impact. Because the impact is more distant for them than for most people, the system incentivises policymakers to adopt policies while eliminating the disincentive for them to consider. This appears to be a very risky situation because money can be created by parties who are unconnected to the risk of enacting policies that increase the money supply.

Of course, this article does not deny that Bitcoin currently has many shortcomings when compared to fiat money, nor does it deny Bitcoin’s future potential. Bitcoin aims to develop a financial system that can be operated independently of the authorities in order to prevent any potential issues brought on by third parties who operate without a balanced incentive-disincentive structure within the current financial system. Bitcoin creates an extra-legal property right protection mechanism (in terms of money) that is separate from power and politics by relying on algorithms that offer a balanced set of incentives and disincentives to maintain its system.

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62 Ibid.
63 Ibid.
Bitcoin is not governed by any central authority with vested interests. The balance between incentives for actors to keep the system running and disincentives for actors who make mistakes is balanced. Bitcoin producers/miners are not immune, however, to the risks associated with every decision they make. As a result of its consistent increase in supply, Bitcoin can retain its value much better than fiat money as a store of value. The only disadvantage of Bitcoin is that it is rarely used for transactions compared to fiat money, resulting in a small market capitalisation and thus high volatility. Bitcoin might perform better than fiat money if placed in the same situation it is today, especially as a store of value and protection of property rights.

III. WHY THE SOVEREIGN WILL REMAIN

III.A. On The Ideology of Bitcoin

Every system, including Bitcoin, is designed with specific goals in mind. There is the concept of what is right, which directs the design of Bitcoin. To place Bitcoin in a historical and socio-economic context, it is clear that a system is emerging as a reformative (or, some argue, revolutionary) response to the 2008 financial crisis.64 The crisis is viewed as a failure of the state’s ability to manage their financial systems, resulting in the depletion of a million dollars and years of labour. Bitcoin aims to create ‘trustless’ money with no intermediary, removing the state’s hands from the regulation of the money supply, enhancing individual property rights and freedom by designing an extra-legal property rights protection mechanism.

A decentralised autonomous society in which people are liberated from centralised forms of power and control is on the horizon, and it is symbolised by Bitcoin.65 As Satoshi Nakamoto himself said,66 “The root problem with conventional currencies is the trust required to make it work. The central bank must be trusted not to debase the currency, but the history of fiat currencies is full of breaches of that trust.”

The Bitcoin system infrastructure ostensibly contains an ideological claim on who should or should not enforce specific actions. Bitcoin emphasises the primacy of individual property rights, that individuals are entitled to the fruits of their labour. In the liberal conception, property rights are fundamental and essential, derived directly from the natural law that a person, by using their

65 Baldwin, “In Digital We Trust.” 7
labour and time allocation, has the right to produce extra-personal material and exercise control over that material. The social institution of money as an extension of valuation is embedded into the very nature of human beings. Fundamentally, the good/bad financial system governing this activity will significantly affect our freedoms and rights. Valuation allows for priority and motivates people to work. In a specialised economy, it also helps to close the gap between subject and object, thus contributing to society. Labour is a valuable activity that deserves to be rewarded. People who cultivate the value of their labour should have the right to store those values, keep them, and use or allocate them as they see fit. Money allows us to store the value of our labour, and we have the right to exchange it for whatever money we can get.

Money, as a representation of the value created by the creative process of labour, is a natural right of the person who uses their labour to create that value. Money represents a person’s share of all available goods and services. Bitcoin’s absolute scarcity is purposefully designed to be inflation resistant. The government tends to increase the amount of money available to finance its programs. The process indirectly transfers the value obtained by someone. That violates one of the most fundamental human rights: property rights. The existence of the central bank as a centralised entity with control over the value of money, as well as the undeniable fact that the fruits of one’s labour is partially dependent on the Central Bank’s good/bad performance, runs counter to the notion that one must have complete control over the fruit of their labour. Therefore, Bitcoin sees that the financial system should be constructed outside the dominion of power and politics.

III.B. The Delusion of Natural Rights
Property rights are primarily derived from the concept of natural rights. Natural rights can be considered rights that humans have by nature. Natural rights’ content is identified by determining what rights humans have in the natural state. As previously stated, the state of nature is the state prior to the formation of social institutions such as the states, laws, morals, and economics. There are various opinions regarding the content of natural rights, but experts generally mention three rights, the right to life, the right to freedom, and the right to property (life, liberty, property).

In a state of nature, a human being has absolute freedom where they are literally free to do anything. They are also free to defend their lives, as well as

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to obtain absolute control over a plot of land or goods that they acquire and creates through their labour. Naturally, humans have the right to life, liberty, and property. Any restriction on these three rights is an alteration of the state of nature. It is unnatural to restrict the rights that people naturally possess. Therefore, any restriction requires justification and consent, and there must be a clear reason to restrict this right. For example, a state is essentially a form of restriction on the right to freedom. The state’s existence is justified based on a mutual agreement to institutionalise the protection of other rights and their derivatives. Therefore, how the state will be run must be based on the consent and will of the people as natural owners of the freedoms that are restricted by the imposition of the state.

In the case of property rights, similar restrictions also require justification and consent. Taxation, for example, is a levy on the fruits of a person’s labour. The existence of taxes is justified by the need to pay for state administration and its fiscal programs. The people or their representatives must approve the type and amount of tax. On the other hand, inflation driven by government spending violates property rights by transferring the value of money, which is a person’s property rights, without consent. The fact that a central bank controls the supply of fiat money (which affects its value) is an inconvenience. That means that an institution could control someone’s fruits of their labour.

Although this article previously cited Hobbesian contractarianism, its application is limited to a descriptive use of social institutional formation rather than making normative claims about the content or form of social institutions based on social contract. We contend that the natural right is one of humanity’s most extraordinary delusions, large enough that nations have been founded solely on this principle. It is true that in the state of nature, humans have a wide range of freedom. However, it would be incorrect to use this fact as evidence that humans possess a certain kind of right. Just because someone can do something does not mean they are deserved/entitled to do it.

Rights are normative. To have rights does not simply mean that a person has license to do something. Instead, it means that a person is entitled to do so. In the anarchy of the state of nature, a person has extensive freedom not because they are entitled to exercise their freedom but simply because they can. A right is unnatural because it requires a restriction to the state of nature of absolute freedom—a person with certain rights meaning that anybody is obliged to at least respect it. Right to life does not mean that they can live, but they are entitled to their life. Thus, others should not kill them, even if they can. It contains normative material whose justification is insufficient based on what people can do in a given period. The claim that someone has the right to something because they can do it in a state of nature is a naturalistic
fallacy. Rights did not exist from the beginning because they are just one of the institutionalised constructs. Rights, like money and the state, are just social instruments developed by humans as a means of survival in a communal living environment. The concept survives because it promotes cohesion and allows humans to live in large groups. The only way to say that rights are natural is to start from the fact that rights as social institutions arise from the natural process of human evolution.

III.C. The Illusion of Entitlement
Entitlement is the fundamental principle of property rights. A person is entitled to the fruits of their labour because they are obtained by incorporating a person’s efforts, allocating their limited lifetime resources, and utilising their freedoms to carry out labour processes and add value to society with the goods and services they produce. People are free to choose and allocate the value they earn for whatever purposes they see fit. They can also decide to share that value with others. However, no one else is entitled to the fruits of their labour. It is true that when a person puts effort, use their freedom, and spend their time engaged in the value-creating activity of labour, they are entitled to the results of their work. However, it is hard to justify that someone who does the process is entitled to all the fruits of their work. Everyone enjoys the fruits of labour differently mainly because the capacity of people to produce value through labour likewise varies. Some can produce more, and some are only able to produce in sufficient quantities.

Some people, for example, have a biological advantage, and some have an ideal socio-economic situation, and some have both. Some people are born with their advantages while some with disadvantages. When a person is born with favourable characteristics, whether it is biological or socio-economic, it just happens, and is not earned. When a person is born with unfortunate disadvantages, it just happens, and they do not deserve the impediment to creating greater value through labour. All of those factors significantly affect how someone does the labour process and creates value. Therefore, there are aspects of our work that we do not earn. We are entitled to the fruits of our labour, but not entirely. Therefore, it is precisely the right thing to set aside a portion of the fruits of one’s labour so that someone with different inherent value creating power can enjoy it.

III.D. Indonesia as a Welfare State
Currency is an essential component of any country. As a result, every country will strive for currency sovereignty, which applies to all domestic transactions. The currency has historically served as a symbol of the king’s sovereignty in
the monarchical system. Classical writers such as Charles Loyseau and Cardin Le Bret explained that currency in classical Europe was manifested in coins and usually bore the identity of a monarch or king. Those kings claimed the right to mint coins (ius et proprietas). When monarchies began to collapse, and new ideas about the nation-state and welfare state emerged, the function of currency shifted. As previously described, the function of currency as a symbol of sovereignty evolved into a means of achieving economic and monetary independence as well as a vehicle for promoting social welfare. Nonetheless, the role of currency as a symbol of sovereignty in a modern state is not lost but rather has become a secondary function compared to the role of monetary and economic welfare.

The Permanent Court of International Justice in the 1929 ‘Serbian Loans Case’ was the first international judicial body that recognised a state’s right to determine its currency. According to the ruling, “it is indeed a widely accepted principle that a state is entitled to regulate its own currency.” Articles 1 and 2(1) of the 1974 Charter of Economic Rights and Duties of States stated that “every State has the sovereign and inalienable right to choose its economic system.” The article opined that “every State has and shall freely exercise full permanent sovereignty over all its wealth, natural resources, and economic activities.”

Furthermore, the International Monetary Fund (IMF) considers currency sovereignty to be part of a country’s rights. These rights include the following:

- The right to issue currency applicable within its territory in the form of paper or coins;
- The right to determine or change the value of that country’s currency; and
- The right to regulate the use of national or foreign currency in that country.

Regarding the right to determine the currency for the state, FA Mann explained that the state has the authority to decide whether it should be pegged to another currency. The first is to allow or prohibit the use of foreign currency. The second is to supervise each transaction or exchange. The third is to conduct other monetary policy-related activities. The state’s authority over the use of currency in its country is intended to protect its economy.

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Currency has been an extension of the sovereign for a very long time. Plenty of stories of bad management throughout history have brought forth the idea of non-intermediary currency. However, the state’s intervention in the money supply appears to be relevant to the foreseeable future, despite the fact that it has drawn criticism and been the subject of numerous unfavourable cases. After all, we do not reduce society to a purely arbitrarily private contract, especially given how egotistical most people are. This is the exact reason that we created a social institution in the first place. If a person is not driven to allocate fractions of the fruits of their labour, then the government must.

No one achieved a decent life totally on their own as no one has earned their birth rights with their intellectual prowess, healthy body at the right place, and at the right time in history. No one earned not having any illness and disability or to not having any economic disadvantages limiting their choices in life. On the other hand, no one deserves to be born with a terminal illness with limited resources and opportunities. Humans are not fully comprehending how certain events around them develops. Given that fact, we appear to require a state to establish and enforce certain priorities so that we do not leave to die those who are unfortunate, which cannot be operated within Bitcoin’s extra-legal property rights conception that put financial system beyond state authority.

It appears that this problem was foreseen in Indonesia from the beginning. Historically, the founding fathers of Indonesia desired to fight against capitalism, which is considered a system detrimental to the people’s prosperity. It can be seen from Soekarno’s speech on 1 June 1945 that:74

The Republic of Indonesia must adhere to the welfare principle. The principle is that there will be no poverty in the sovereign state of Indonesia; our principle must be: do we want an independent Indonesia where all the people are prosperous? where everyone has enough food, enough clothes, lives in prosperity, feels that they belong to the motherland that can provide them with adequate food and clothing?

Soekarno’s speech was the basis of the existence of the fifth principle of Pancasila as the basis of the Republic of Indonesia, namely social justice for all of Indonesia. In addition, in the Preamble of the Indonesia Constitution of 1945, it is stated clearly that one of the goals of the founding of the Republic of Indonesia is to promote public welfare.

Other founding fathers share Soekarno’s viewpoint on the necessity of establishing a welfare state in Indonesia. Soepomo, for instance, contended that Indonesia should not transform into the kind of nation Jeremy Bentham envisioned, which it holds individualism and capitalism are necessary for the

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The primacy of property rights and extreme individualism is not functional within this communal system of the welfare state. The welfare state has been a tool for regulating market dynamics and directing economic development to accomplish shared objectives, establish justice, and foster shared wealth and freedom.

That explains the justification for state intervention in the financial system in Indonesia, as well as the main reason for Indonesia’s negative attitude toward pure individualism. As stated in Article 23 of the Indonesian Constitution 1945 before it was amended:

75 Ibid., page 132.
76 Mohammad Hatta, *Demokrasi Kita* (Jakarta: Universitas Indonesia, 1992), page 14.
79 Ibid.
Also, the type and price of the currency are stipulated by law. It is important because the position of money greatly influences society. Money is primarily a medium of exchange and a measure of price to facilitate exchange, buying, and selling in the market. In connection with that, there needs to be a kind and form of money that the people need to measure the exchange price. The goods used to measure the price must be fixed at a price that does not go up and down because of unstable money conditions. Therefore, the condition of the money must be determined by law. For this reason, the position of Bank Indonesia, which will issue and regulate the circulation of banknotes, is determined by law.

According to the explanation of the 1945 Indonesian Constitution prior to its revisions, the foundation of the Central Bank of Indonesia is an instrument of welfare.

The government’s debt and monetary expansion are not done for no reason. It helps the government to fund social and economic programs. Using a fixed currency supply means the government ought to cut its spending. The value that inflation ‘steals’ from a person has been distributed through government spending. This is designed to ensure that the less fortunate could afford education, health, and social justice. Fiat currency seems to fit with that purpose rather than Bitcoin. Despite being easily inflated, fiat currency offers more flexibility for the state to respond to any circumstance with a greater degree of control, while Bitcoin does not have a supply that can be adjusted to the economic demand of society.83

IV. CONCLUDING REMARKS
Historically, Bitcoin emerged as a reformative ideological response to the 2008 financial crisis. Satoshi Nakamoto claims that the 2008 financial crisis illustrates why the government should not be allowed to control currency as it endangers individual property rights.

From a philosophical perspective, the idea of property rights is crucial to the social institution of money as an extension of valuation that is built into the very nature of humans.

By establishing extra-legal property rights protections that can be operated beyond the realm of power and politics, Bitcoin offers a cleverly designed financial system that strives to protect individual property rights better than fiat currency.

However, we found that Bitcoin’s ideological foundation is founded on the false premises of absolute and full individual property rights derived from the

concept of natural rights. Those ideas may result in economic unfairness for the unfortunate. In order to achieve economic justice for the less fortunate, states must establish and enforce certain priorities.

In order to achieve that, states maintain some level of control over the financial system, thereby keeping the financial system within the realm of power and politics. Furthermore, we think that the system in which a state has a certain level of control over the financial system is compatible (and thus justified) with Indonesia’s economic commitment and goals to create a welfare state, as reflected in its constitution.

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