

THE VIRTUAL PROPERTY AS COLLATERAL FOR A LOAN: A COMPARISON BETWEEN INDONESIA AND UNITED STATES

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ABSTRACT

The Virtual property meets a set of criteria for it to be considered an object of property under property law which are rivalrousness, persistence, interconnectivity, valuable, available, and defendable from interference by the other parties. As the meaning of property is extended to include the virtual property, it should be treated with the same legal status as real-world property. Therefore, it is reasonable that the virtual property as an object of property can be used as collateral for a loan because it does not only give the rights to peaceful enjoyment but also provides security interest. Under Article 9 Uniform Commercial Code, eSnowshoes, a United States-based company, uses its domain name and storefront in a virtual world called Second Life to secure financing. By comparing Indonesian legal framework to the United States legal framework for the virtual property and security law, this article discusses the possibility for the virtual property to be used as collateral for a loan in Indonesian legal system. In this digital era, granting users property rights on the virtual property will promote economic growth. However, some developers are still enforcing Terms of Service and End-User License Agreement that restrict users from owning virtual property they have made in the virtual world. The clarity of the ownership of the virtual property is needed as only eligible subjects capable to use their property as collateral for a loan. Also, it must be clear what type of property that the virtual property belongs to. While the United States enacts Article 9 Uniform Commercial Code for personal property and fixture, the Indonesian legal system recognizes pledge and fiduciary as a security interest for the movable property. Acknowledging the virtual property as the movable intangible property is the most practical way to do for it to be able to be used as collateral for a loan under Law No. 42 of 1999 on Fiduciary because the perfection for it does not need to meet *inbezitstelling* principle. However, the usage of the virtual property as collateral for a loan is needed to be discussed further by the economic and financing experts on how to assess its value. The method used in this research is descriptive analysis, carried out through expert interviews, regulation, literature studies and normative juridical.

Keywords: *Virtual Property, Indonesia, United States, Collateral for a Loan*

1. INTRODUCTION

In recent years, people have been using the internet and advanced technology in daily activities. Indonesia is one of the top 5 countries internet users in the world with 143,260,000 internet users. [1] The internet has changed the way people living their life and much likely changed the economy as well. Adroit Market Research in its latest study titled, “Global Virtual Goods Market Size 2017 By Gender (Female, Male), By Age Group (13-25, 25-35, 35-45, 45+), By Region and Forecast 2018 to 2025” has shown that the global virtual goods market value is estimated to reach USD 189.76 billion by 2025 driven by the rapid growth in the gaming population across the globe. The global virtual goods market share is witnessing exponential growth from online gamers who purchase virtual goods such as swords, magic wands, or houses using real money. The rapidly growing usage of the internet has resulted in a multibillion-dollar marketplace for virtual products. Besides, the global virtual property market is expected to account for more than 75% of the overall market by 2025. [2] The use of the internet to generate wealth has grown exponentially and the legal interest that users have in their virtual property will influence the ability for all to prosper in this new virtual economic space. [3]

Although there are still different opinions among the jurists whether property law or contract law that should be the governing the law of virtual worlds, few cases in the world has shown that the meaning of property is extended to include the virtual property. These landmark cases indicate that the court has started to recognize the virtual property as an object of property. Thus, it is reasonable that virtual property is governed under property law. Erlank, one of those who believes that virtual property is something real, brings up the statement, “*Lex virtualis ipsa loquitur*, and therefore the virtual property is here to stay.” [4] The statement is understandable as the virtual property is something inevitable in this digital era. The recent downtown of the e-commerce sector has revealed that for most modern corporations, the most valuable assets are intangible assets including virtual property to secure financing. [5] It is somewhat true that internet companies and technology are rapidly replacing brick-and-mortar companies.

To determine which kind of law-property law or contract law-should be the law governing the virtual world and whether the virtual property gives property rights or personal rights is one of the most

important problems arises when talking about the virtual world as it will affect what can we do with the virtual property. By creating virtual goods as virtual property under property law, there are so many benefits from the users' perspective. For example, the virtual property can be used as security or collateral for a loan. In The United States, there was already a case where a company used its virtual property to secure financing. eSnowshoes, Inc.-a hypothetical small company selling snow-shoes online-borrowed \$100,000 from Commercial Bank and granted the bank a security interest in its inventory, accounts receivable, and general intangibles, including the *eSnowshoes.com* domain name that is registered with Network Solutions and the eSnowshoes' storefront in the virtual world Second Life. [6] Inspired by this case, this research intends to describe the characteristics for virtual property to be treated with the same legal status as property in the real world, property rights on the virtual property, and the ownership of virtual property. These points are needed to be discussed to understand if the virtual property can be used as security or collateral in the Indonesian law system. The method used is descriptive analysis, carried out through expert interviews, regulation, literature studies and normative juridical.

2. THE CHARACTERISTICS FOR A VIRTUAL PROPERTY

Fairfield argues that virtual objects can indeed be considered objects of property and should be treated under property law. [7] This is based on three characteristics which virtual property shares with the real-world property. The first characteristic is that of rivalrousness, meaning that an object that is being used or consumed by one user cannot be used or consumed by other users. The second characteristic is persistence, meaning the object has to exist at all times regardless of whether the user is interacting with it. The third characteristic is that of interconnectivity, meaning objects in the real world affect their surroundings, including people who are not the owner of the object, by the laws of physics. Fairfield also argues that interconnectivity leads to the creation of value because as others experience objects they do not own, these objects may become desirable, and thus marketable, to them.

The meaning of the word “property” has been changing from time to time by the growing interest of society. Salam argues that it can be to include virtual property as an object of property under Article 499 Indonesian Civil Code (*Kitab Undang-Undang Hukum Perdata*) once “something” meets a set of characteristics for “something” to be included as property. In addition to the Fairfield's characteristics of virtual property, Salam formulates the latest characteristics for “something” including the virtual property to be considered as an object of property. These characteristics are 1) valuable, 2) available, and 3) defensible from interference by the other parties. [8]

There are four theories provided by legal commentators to justify users of the virtual world, including Second Life, holding the property rights in the virtual property they acquire. These theories are the Lockean Labor theory, the Personhood theory, the theory of Theft Protection and Deterrence, and the Utilitarian theory. According to Lockean Labor theory, users should have rights in the virtual property that they create because this property is created through their labor. [9] Through the Personhood theory, Radin sees the justification of property rights because through spending a lot of time with a certain property, people grow sentimentally attached to it, and then becomes an integral part of their lives as well as a defining part of who they are as a person. These meaningful possessions have a lot of sentimental value attached to them, to the point where they stop being merely an object but also become part of one's sense of identity. [9] The third theory is the theory of Theft Protection and Deterrence. Ledgerwood proposes to bestow users with property rights in their virtual property to protect the property of users of the virtual world against theft as well as to deter thievery in virtual worlds. [11] He argues that a court's recognition of property rights makes users better off by increasing enforcement rights in the virtual property. The fourth theory that is used to justify the property rights on the virtual property is utilitarianly created by Bentham. It dictates that resources are to be moved into the hands of the user who values these resources the highest. [9] The idea behind this is that

the person who values a resource the most is also the person who can use it most efficient and productive. [9] Applying the utilitarian theory to the virtual world means that property rights for users are considered a necessity to ensure the greatest virtual welfare.

Few cases in the world have shown the recognition of property rights on the virtual property. For example, *Kremen V. Cohen* case where The United States Court of Appeals for the Ninth Circuit ruled that it can be to have virtual objects, in this case, is a domain name, that should be given the qualification of ‘object of property’. [12] The court provided three criteria to determine whether a virtual object deserves the status of the property and determined that, if these criteria are met, property rights in the virtual property should be granted. Those are: First, there must be an interest capable of precise definition; second, it must be capable of exclusive possession or control; and third, the owner must have established a legitimate claim to exclusivity. [12] There have been several other cases regarding virtual property before the court all over the world.¹ Few of them, including the landmark case *Kremen v. Cohen* have shown that the virtual property can be treated as an object of property under property law once a set of criteria for the virtual property to qualify as an object of property are met. That way, the virtual property is provided the same status as real-world property.

To support this research, there is a researcher from South Africa, Bekker who critically considers the question of whether the concept of the virtual property may be understood as a form of property in the constitutional property clause. His research was conducted at the South African Judiciary which has not yet provided clarity whether the virtual property can be included, recognized and protected or for the extent of that protection can occur. The importance of extending property protection to virtual property lies in the fact that virtual resources have value in the real world. This time virtual property in South African law only exists in theory and is completely illegal in the real world. Bekker's conclusion stated that the virtual property will be easily recognized as property for constitutional protection, given the

¹ See, e.g., *Dorer v. Arel*, 60 F. Supp. 2d 558, 560-61 (E.D. Va. 1999); *Network Solutions, Inc. v. Umbro Int'l, Inc.*, 529 S.E.2d 80, 87 (Va. 2000), Complaint at 5-6, *Bragg v. Linden Research, Inc.*, 487 F. Supp. 2d 593 (E.D. Pa. 2007) (Case No. 06-08711), available at http://lawy-ers.com/BraggvLinden_Complaint.pdf; *Li Hong Chen v Beijing Arctic Ice Technology Development*

Company (2003, Beijing Second Intermediate Court); *Evan v. Linden Research Inc* Case No 4:11-cv-1078-DMR; LJN: BG0939, *Rechtbank Leeuwarden*, 17/676123-07 VEV; also Michaela MacDonald, “The Case for Virtual Property,” Thesis, Queen Mary University, London, 2016.

existence of state interference. Virtual property should be protected in a private and state environment or privately by constitutional law. [13]

Discussing the characteristics of this virtual property, it reflects that it is legally possible and acceptable for virtual property to be an object of property. That means the virtual property is also an object that can be bought and sold. In this digital era, where a lot of people can download e-books or music files easily, unfortunately, some virtual properties are easily duplicated illegally. The virtual property that can be used as collateral is the virtual property that meets a set of criteria to be treated with the same status as property in general, which is rivalrousness, persistence, interconnectivity, valuable, available, and defensible from interference by other parties. If stored on web servers, the virtual property can be a profitable product with economic value because only those with property rights in it can use it. From the marketing point of view, there will be competition in the consumption and usage of the property. This competition occurs because of the general principle in the economy which is called scarcity where not everyone in the world will have the same opportunity to use the resource, including property. Thus, the limited availability of the virtual property and the rising demand of the virtual property from the community makes the virtual property becomes an attractive property object in business.

German researchers, observing the game trade, have become a professional industry. Some dealers set up a supplier network throughout the world and use "Gold Farmers" to produce resources in the game. Gold farmers are freelancers who choose valuables and currencies in online games. In countries with a strong gaming culture such as China and Korea, the virtual property is now becoming an important object in the economic sector. Because of low local wage rates, Chinese traders benefit from large margins. Free economic exchange creates a variety of virtual products comparable to the real world which makes the economy more developed. [14] Thus, characteristically, the virtual property is possible to be developed throughout the world, including Indonesia.

The virtual property is immaterial and intangible, as it is impossible to physically interact with the property itself. However, while it is impossible to physically grasp a virtual item on the virtual world, the existence of the virtual items has a very real impact in the real world, notably on the

hard drive of the service provider's server. For a property right to exist, other than categorizing it as tangible or intangible, it is also important to categorize it as either the movable or an immovable and must be subject to appropriation.

In Indonesian legal system, the distinction of property as the movable and immovable property is considered as the most important distinction because it determines what kind of security interest that can be imposed on it and the sale of a debtor's assets in execution. The United States legal system differentiates the type of property as real property which has the similarity to immovable property, and personal property which has the similarity to the movable property, also fixture which is a personal property that is permanently attached to the real property. This distinction is provided to determine what type of security interest that can be imposed on the property. Security rights that are governed under Article 9 Uniform Commercial Code are applicable for personal property and fixture, while provisions of real property as collateral varies on each state. The problem without any clarity on what kind of a security interest that can be imposed on the property is the creditor would not know how to perfect their security interest. This will also lead to not being able to enforce their security interest in the event of default. Hence, the clarity of what type of property that the virtual property belongs to is urgently needed to be able to use it as collateral for a loan both in Indonesia and The United States.

Being an intangible property, the virtual property also belongs to the movable property because the property is considered to be movable if it can be moved from one place to another without damaging it or losing its identity. The immovable tangible property is usually a unit of land, including all property that is permanently attached to the land. The immovable property can also refer to sectional title units. It is common to categorize all things that cannot be categorized as the immovable as movable. The idea of virtual property as the movable property is also supported throughout the world. China civil law drafter has described the virtual property as the movable property. [15] Along with China civil law drafter, Quebec civil law most likely recognizes the virtual property as the movable property under Article 906 Civil Code of Quebec. [3]

3. THE OWNERSHIP OF THE VIRTUAL PROPERTY

The question who owns the virtual property arises when talking about property rights in the virtual property.² One of the main reason for the ownership of virtual property like virtual items in the virtual world to be unclear is the End-User License Agreements (EULAs) that users of virtual world or players of the online game must accept to be able to enter the virtual world or start to play the online game. These EULAs are usually restricting the users or players to obtain the ownership of virtual items they have made by stating that the virtual items are exclusively the property of the developers. Gemscool and Lyto are among those online game developers in Indonesia who stated it clearly on their End-User Licenses that the virtual items are the property of the game developers.³ By applying this rule, it is clear that the users or players do not obtain any ownership of the virtual items they have made and the game developers can erase those virtual items from the system anytime.

This provision regarding the ownership of the virtual items that restrict users from owning the virtual items they have made is too one-sided because despite making those virtual items by spending time, effort, and money on it, the users do not have any legal protection if those virtual items are taken away from them. Also, one important thing to remember is any the virtual property would not have any monetary value without any creativity and effort from the users. With that being said, letting the developers obtain the full ownership of property rights on the virtual property without taking the users' effort in consideration is not fair. As legal protections for users' of virtual world will give incentive for them, causing even bigger development on the virtual property industry which is beneficial for both users and developers, the proper legal framework to protect both developers' and users' rights on the virtual property is needed to support the growth of the virtual property market.

Lindenlab, a developer of an online virtual world called Second Life, is the first game developer

who states clearly on its revised version of Terms of Service that the users of Second Life on the virtual property they have created in Second Life.⁴ This is a breakthrough in the virtual property rights as the question who owns the virtual property often arises when talking about the virtual property being governed by property law.⁵ It is fair for the game operator to argue that they have greater property rights because they created the platform that made the virtual item possible. On the other hand, it is also reasonable for the players of the online game or users of the virtual world to argue that they have greater property rights because the player expended time and effort within the game to find the item. It is important to know who owns the virtual property because when the virtual property is governed by property law, it has real-world value. When it is unclear about who owns the virtual property, and validity of any legal action towards the virtual property done by the users would be questionable. This is related to a principle in property law, which is *Nemo plus iuris transfere (ad alium) potest quam ipse habe*, meaning no one can transfer more rights (to another) than he has. According to this principle, only a valid owner of a property is eligible to transfer property rights to another.

The discussion about the virtual property has reviewed several aspects of the virtual property which makes it possible for the virtual property to become an object of property under property law, its attractiveness, its value both economically and psychologically and on a large scale adoption of the virtual property as part of everyday life. Although not tangible, the virtual property is already a property that exists as an object of the real world. The types of the virtual property found in a virtual world such as those created, used and traded by users and developers who make and the virtual world becomes real. Even though many people today do not realize that the protection of their legal rights on the virtual property is needed to be recognized, Erlank firmly believes that the virtual property will be very important in the next ten to fifteen years, to the point we all will be able to look back and wonder how we can live without it. [16] This statement

² See Leah Sehn, "Who Owns the Virtual Items?" *Duke Law and Technology Review*, Vol. 9, 2010, p. 1-14., also Ryan Vacca, "Viewing Virtual Property Ownership Through the Lens of Innovation," *Cornell Law School Inter-University Graduate Student Conference Papers*, 2008.

³ See <https://www.gemscool.com/member/eula.php> and https://member.lytogame.com/member/persetujuan.asp?view=lih_at#wrapisi.

⁴ See <https://www.lindenlab.com/releases/second-life-residents-to-own-digital-creations>

shows how important it is to start to think about the clarity of the virtual property legal status to protect both users' and developers' right which consists of ownership of the virtual property, the right to access and to use the virtual property, and the security interest of a virtual property. One of the steps is to legislate regulation for Indonesian legal framework for virtual property so that it will be legally recognized under the Indonesian legal system as the movable intangible property.

4. THE VIRTUAL PROPERTY AS COLLATERAL

Property rights consist of the rights to peaceful enjoyment of the property and the security interest on the property.⁶ Despite the different legal system, it is widely known that both in the United States and Indonesia, other than the rights to peaceful enjoyment of property such as the right of ownership, property rights also provides security interest. As the virtual property is recognized as property under property law, it is logically and legally reasonable that the virtual property as an object of property can be used as collateral for a loan because it does not only give the rights to peaceful enjoyment.

The security is taken as an insurance in case of need and it must always be remembered that the test of any insurance is that should be available, readily realizable, and sufficient when required. The acceptability of the virtual property like a virtual storefront in a virtual world and domain name should comply with the acceptability of an object to be used as collateral in general. The focus or main interest in taking security or collateral is its ability to fulfill obligations to the creditor, it should have economic value (valuable), its existence and validity depend on the existence of a valid agreement between the creditor and the debtor. [17]

From the viewpoint of a banker as a party who regularly provides financing facilities, a property needs to fulfill some requirements to be accepted as collateral or security. The bank's strict requirements in accepting an object as collateral make sense as bankers are guided by their prudence principle. The banking business must be run safely, sound, and without any substantial risk. Even though in practice, a bank is often willing to accept security

which does not meet all these requirements, but the essential attributes of sound banking security may be listed as follows: [18]

1. The value of the security should be readily ascertainable and reasonably stable over the years, providing sufficient margin for depreciation. Any security subject to frequent wide fluctuations in price is unsuitable unless there is a substantial margin between the original value and the maximum advance.
2. The security should be readily realizable in all conditions, with a simple title which preferably in transferable without undue cost or trouble.
3. The bank should be able to obtain a safe, unquestionable title, without undue trouble or expense.
4. The bank should incur no liability to third parties arising out of its title to the security. For example, partly paid shares involve liability in the event of a call and leasehold property may occasion liability for dilapidations upon the expiry of the lease.

For bankers who provide financing facility, it is prudent whenever possible to obtain security as a form of insurance available in the background should some untoward and unexpected development occur to jeopardize the safety of the advance. In contrast, Fuady thinks it is a mistake when a bank or a creditor put guarantee as the main factor to build trust for the debtors to repay their debt because skepticism to debtors' ability to repay their debt cannot be replaced by providing a guarantee. For Fuady, a guarantee is not an insurance for the bank even though it functions to make the creditor or bank sleeps better at night. Some requirements for collateral to be considered as good collateral: [19]

1. Easy and fast in the process of binding it as collateral;
2. It does not put a creditor in dispute;
3. Easily assessed;
4. Increasing or stable value;
5. Does not incur any liability for the creditor. For example, the responsibility to pay the tax.

⁶ Frieda Husni Hasbullah, *Hukum Kebendaan Perdata: Hak-hak yang Memberi Kenikmatan*, hlm. 60

6. In the event of default, it should be easy to be executed at a low cost without any help from the debtor. In other words, collateral must always be near to cash.

In general, it has shown above that to be accepted as collateral, an object needs to be assessed to know its value because its value is expected to be increasing over the years or at least stable to provide sufficient margin for depreciation. It also should not incur any added liability for the creditor, does not cause any trouble or putting a creditor in dispute with any other parties, and it should be realizable in all conditions at low cost. Because these rules are applicable for collateral in general, so it must be considered when taking the virtual property as collateral. In this section, the opportunity for the virtual property to be used as collateral will be discussed by showing its economic value and by observing the provisions in applicable regulations in Indonesian and United States legal framework for security law.

The significant growth of the virtual property market in recent years indicates that the virtual property has economic value. In fact, for start-ups and modern companies, the most valuable asset is their intangible asset, including virtual property such as domain names. To promote economic growth, the potential of the virtual property which has economic value should be utilized properly. Using virtual property as collateral to secure financing is one way to maximize its potential in this digital era. The distinction between *gadai/pand* (pledge), *fiduciary*, *hypothec*, and *hak tanggungan* is still applicable in the Indonesian legal system. Unlike Indonesia, The United States legal system has abandoned the old distinctions between the different ways of securing a loan. The distinction in The United States legal framework for security interest is based on the type of property. All property that belongs to personal property and fixtures can be used as collateral under Article 9 Uniform Commercial Code, whereas real property as collateral is regulated differently in each state.

Enacting the revised version of Article 9 Uniform Commercial Code, all the old terminology of the law, and the favorites beloved of lawyers such as pledge, mortgage, conditional sale, trust receipt, etc. have been consigned to the corridors of legal history and replaced by the unitary concept of a security interest. [20] The scope of Article 9

Uniform Commercial Code is broad enough to include electronic assets in an attempt to adapt to electronic market developments. This Article 9 Uniform Commercial Code has been described as the most modern system of secured transaction in the modern world. [20] Under on this provisions about security interest that includes general intangible as collateral for a loan, eSnowshoes has used its domain name and storefront in a virtual world called Second Life to secure its financing. It is logically acceptable to use its domain name and virtual storefront in Second Life because of its economic value. Also, according to the provision of the Uniform Commercial Code, there are three requirements for a security interest to be legally valid. Those are: (1) the security interest is given a value, (2) the borrower owns the collateral and (3) the borrower has signed the security agreement. The creditor, Commercial Bank even perfected its security interest by filing the financing statement.

The problem arises when eSnowshoes defaults on its loan and the creditor, Commercial Bank seeks to foreclose on the collateral under to the security agreement on its loan. The creditor wants to know how to enforce its security interest in the domain names and the storefront in Second because neither asset falls within the purview of a “payment right” or “monetary obligation” as defined by Uniform Commercial Code. The creditor must rely on the default provision of U.C.C. § 9-601(a)(1), which provides that secured party “(1) may reduce a claim to judgment, foreclose, or otherwise enforce the claim, a security interest, or agricultural lien by any available judicial procedure.” Even if Commercial Bank can to secure a judgment against eSnowshoes, because of the significant variance on state law remedies, traditional remedies such as replevin, garnishment, and execution may be unavailable for a “general intangible” asset such as a domain name or a virtual store. [5]

Commercial Bank is confused how to enforce its security rights because the remedies vary from one state to another and none of those traditional remedies is available to enforce its security rights on domain name and virtual storefront in the virtual world. While the mechanism in the United States legal system varies in each state, the judicial procedure that is provided for the creditor in Indonesian legal system in the event of default depends on the type of a security interest that is imposed over the object. For example, according to

Article 1155 Indonesian Civil Code (*Kitab Undang-Undang Hukum Perdata*), “In the event that the debtor or the pledgor does not comply with his obligations, the creditor shall be authorized, following the lapse of a specific term or in the event that no specific term was stipulated, after a summons in respect of compliance, to sell the pledge in public under to local customs and in accordance with the usual requirements, to settle the debt which shall include the interest and costs incurred from the proceeds of the sale. If the pledge is of the commercial items sold at the market or securities traded on the stock market, then the sale can also take place in such locations, provided that two agents involved in such business shall act as intermediaries.” Also according to Article 1156 Indonesian Civil Code (*Kitab Undang-Undang Hukum Perdata*), “In the event that the debtor or the pledgor fails to fulfill his obligations, the creditor may demand in the court that the pledge shall be sold to satisfy the debt including the interest and costs, in the manner to be determined by the judge, or the judge shall admit the creditor’s request that the pledge shall be retained by him, until an amount has been determined in the judgment to pay off the debt and the interest and costs. Concerning the transfer of the pledge in the events mentioned herein and in the previous article, the creditor is required to notify the pledgor by not later than the following day if there is a daily postal service or telegram communication, or else by the first departing mail. Notification by telegram or registered letter shall be regarded as proper notification.”

For *fiduciary*, fiduciary execution is governed under Chapter V of the Law No. 42 of 1999 on Fiduciary. According to Article 29 (1), “The debtor or the Fiduciary giver defaults, the execution of the object of Fiduciary can be done by:

- a. implementation of the executorial title referred to in Article 15 paragraph (2) by the Fiduciary receiver;
- b. sale by the fiduciary receiver through a public auction and deduction of payment of its claim from the sale proceed;
- c. direct sale with the agreement of both the Fiduciary giver and receiver if thereby the highest price is obtainable to the benefit of the parties”

Also, according to Article 31 of the Law No. 42 of 1999 on Fiduciary, “Fiduciary giver shall deliver

the object of Fiduciary for Fiduciary execution.” Similar to Article 1155 Indonesian Civil Code (*Kitab Undang-Undang Hukum Perdata*), Article 31 of the Law No. 42 of 1999 on Fiduciary stipulates “Where an objects of Fiduciary consists of inventory or securities that can be sold in the market or on an exchange, sales can be carried out in accordance with the applicable laws and regulations.”

As discussed above, the most important distinction on type of property in Indonesian legal system is whether it is a movable or immovable property to determine what kind of a security interest that can be imposed on it. One of the characteristics of the virtual property is it is categorized as the movable property. The security for the movable property in Indonesia is provided utilizing *fidusia* (fiduciary) or *gadai/pand* (pledge).

I propose the virtual property as an object of *fidusia* (fiduciary) under Law No. 42 of 1999 on Fiduciary because as a movable intangible object, it is way more practical to apply the provisions of perfection of fiduciary as it does not require the debtor to give possession of the items to other parties to meet the *inbezitstelling* principle. Imposition of *gadai/pand* (pledge) over the virtual property is not possible because the virtual property belongs to the intangible property category whereas according to Article 1152 (2) Indonesian Civil Code (*Kitab Undang-Undang Hukum Perdata*), “A pledge right in respect of tangible movable assets and debts payable to bearer shall be established by placing the pledge in the power of the creditor or a third party, who has been mutually agreed upon by the parties.” According to Article 5 (1) of the Law No. 42 of 1999 on Fiduciary, “Imposition over objects is made by notarial deed in the Indonesian language and is a Fiduciary deed.” Also, according to Article 11 (1), “Objects encumbered with Fiduciary must be registered.” In other words, a creditor perfecting their security rights under Law No. 42 of 1999 on Fiduciary by registering the object that is used as collateral because according to Article 14 (3), “Fiduciary comes into existence on the same date as is noted in the Register of Fiduciary.”

4.1. Regulation

One thing to keep in mind when talking about property law is one of its basic principle, *numerus clausus*. It refers to the idea that both the number and content of property rights is limited and

is traditionally placed in contrast to party autonomy that reigns in contract law. This principle is applicable in most civil law countries, including Indonesia. In Indonesia, the concept of *numerus clausus* is known as a closed system. By applying this closed system, the new type of property such as the virtual property is not recognized unless it is regulated. Meanwhile, in common law system, limitations on the type of property rights are generally less rigid than those of the civil law. Common law has no formal doctrine equivalent to the civil law's *numerus clausus* and accompanying unitary theory of property. [21] The optimal standardization theory applies in common law, not to the specific content of particular rights, but rather to categories of property rights. [21]

There have been instances where the regulators and the courts all over the world were willing to acknowledge or at least consider the virtual property as an object of property, or as having a property-like characteristic. However, there is currently no such legal category as the virtual property. The regulation related to the virtual property in Indonesia is still in the nascent stage. So far, the regulation that has been established in Indonesia regarding the virtual property is Minister of Trade Regulation No. 99 of 2018 which officially permits future trading of crypto-assets in Indonesia. Following the issuance of Minister of Trade Regulation No. 99 of 2018, the Commodity Futures Trading Supervisory Authority (*Bappebti*) issued *Bappebti* Regulation No. 5 of 2019 to provide a detailed regulatory framework for the operation of the physical crypto-asset futures market. This one has been revised through *Bappebti* Regulation No. 9 of 2019. Through *Bappebti* Regulation No. 5 of 2019, crypto-assets are recognized as an object of property. However, there has not been any clause that regulates if crypto-assets can be used as collateral for a loan. The regulation related to virtual property in Indonesia has not been developed yet and the legal framework for the virtual property as collateral for a loan has not been regulated at all.

Without any written regulation on how to use the virtual property as collateral for a loan, there would be a problem arises when someone wants to use the virtual property to secure financing. In a closed system of property law in Indonesia, it must be clear on what type of property that the virtual property belongs to and what kind of a security interest that can be imposed on it. The problem about deciding on what type of property that a virtual property belongs to when it has not been regulated yet is the confusion whether it should belong to the intellectual property rights or property rights in

general. The courts and some scholars tend to give new intangible rights the “intellectual property” label. Thus, virtual property is often categorized as a subset of intellectual property. While a virtual property object could have intellectual property rights attached to it, Erlank argues it is not correct to say that it is purely limited to become an object of intellectual property law. [4] Erlank’s statement has been supported by Moringiello that explains how categorizing virtual property as intellectual property has the potential to hinder the development of the commercial law in that they cause lawyers and the courts to ignore well-tested property analogies, thus prompting them to call for new rules to govern new assets. [6]

Not only to decide which kind of security interest that is suitable for virtual property to be used as collateral, but regulation is also needed to know the perfection of a security interest for the virtual property and to know how to enforce the security interest in the event of default. The most important thing to remember about securing a loan is the fundamental principle of a security law, which is *Droit de preference*. This *Droit de preference* principle is probably the main point of a security law, where preferential creditors are paid ahead of general creditors. Taking security maximizes the creditor’s prospect of recovery in the event of debtor’s insolvency. In practice, no matter how valuable the virtual property is, if a creditor is unable to perfect its security interest, thus will not be in preferential position, and without any ability to enforce its security rights in it, there seems no point of using it as collateral for loan as it is not in line with the purpose of securing a loan itself.

4.2 The Valuation

Another important thing in making the virtual property an object of property under property law that can be used as collateral for a loan is the valuation of it. It is reasonable to expect the borrower to provide support in the form of security when this is sought and this is indeed one of the accepted basic principles of lending. Therefore, it has been widely known that there should be an appraisal before accepting an object as collateral to secure financing. One of the requirements of an object to become acceptable to be used as a security or collateral is the value of the security should be readily ascertainable and reasonably stable over the years, providing sufficient margin for depreciation. [18]

Whether the virtual property belongs to the intellectual property category or property rights in general, there will be a question on what method is

suitable for the valuation of the virtual property. In general, there are three categories of methods for the valuation of identifiable intangible assets and intellectual property. They are market-based, cost-based, or based on estimates of past and future economic benefits. [22] A market-based the valuation is a method where the value of a property is rated based on its market value which is known by reference to comparable market transactions but there are impediments that limit the usefulness of this method, namely, special purchasers, different negotiating skills, and the distorting effects of the peaks and troughs of economic cycles. [22] Cost-based methodologies, such as the “cost to create” or the “cost to replace” a given asset, assume that there is some relationship between cost and value and the approach has very little to commend itself other than ease of use but this method ignores changes in the time value of money and ignores maintenance. [22] The methods of valuation flowing from an estimate of past and future economic benefits (also referred to as the income methods) can be broken down in to four limbs; 1) capitalization of historic profits, 2) gross profit differential methods, 3) excess profits methods, and 4) the relief from royalty method. [22]

For several virtual properties such as assets in the online games, it can be to value it by how much money the users spend to create it although it means the amount of time and effort to create the virtual items is not calculated. For other virtual items like domain names, it is still unclear about what kind of the valuation method that is applicable. The problem is similar to the problem we face on using copyright as collateral for a loan. Although the copyright is clearly stated as an object of fiduciary in Law No. 28 of 2014 on Copyright, it remains unclear up till today on how to value it.

There is research that discusses the intellectual property as 'property' that can be bought, sold, licensed or traded in the same ways as other forms of property. Various opinions will arise about this according to the viewpoint of the field. As for those who work in finance, property labels as valuable assets that are available and financially capable to be used as collateral. The purpose and the importance of law in the field of intellectual property is to benefit the public for getting new creations. “Public goods” will be accepted if the creator understands the value they have and is protected if someone else exploits their work or invention. Therefore, intellectual property ownership and right-holders require a legal basis for property rights that cannot be taken by others, even by the government, unless the government pays the compensation. [23] So, legal rights are included in the nomenclature

regarding intellectual property. In this case, generic terminology is used. As such, the intellectual property is considered as an established standard asset, such as trademarks, patents, and copyrights. Like industrial goods, a person pays the purchase price according to the sale value of the goods. If it is obtained free of charge by the end-user, it cannot encourage competition in creativity, but instead diverts the funds needed by the inventor.

Once the licensee's rights have been converted into money, the licensors no longer have an interest in their intellectual property to be protected. If the license holder transfers his rights, then to uphold security, the transfer of rights to the licensee. Although this logical matter must have become law, there is still a conflict between the intellectual property law and the policy regarding collateral. Thus, in the future, as the intellectual property can be accepted as collateral, the same logical reason is applicable for the virtual property to be used as collateral.

The clarity in the legal framework for intellectual framework goes hand in hand with the clarity of legal status for the virtual property because as what happened in the United States, the court tends to categorize new creation, including the virtual property as the intellectual property. The problem with categorizing virtual property as the intellectual property rights will arise when a creditor tries to enforce their security rights on the virtual property. For example, generic domain names without any copyrights or trademark on it can be transferred to others and can be used with its economic value, or in another word, is has exchange values, hence it can be used as collateral, whereas domain names with copyrights or trademark on it will not have any exchange value for others because it is not possible to use it without its copyright and trademark and the name means nothing without any goodwill.

5. CONCLUSION

In the digital era where the world is developing rapidly, the existence of the virtual property is inevitable and the meaning of property is extended to include the virtual property. The property rights on the virtual property have been recognized in landmark cases all over the world because it meets the characteristics set to be fulfilled to be treated with the same legal status as property in general, which are rivalrousness, persistence, interconnectivity, valuable, available, and

defendable from interference by other parties. Granting users a property rights in the virtual property would permit them to use the virtual property as a means for transferring wealth and the legal interest that users have in their virtual property will influence the ability for all to prosper in this new virtual economic space. However, despite its effect on the commercial economy, the legal framework governing the virtual property in Indonesia is economically and socially unviable. The establishment of regulation on the virtual property in Indonesia is still in the nascent stage and there has not been any regulation on putting the virtual property as collateral for a loan. Because the recognition of a user's property interest in the virtual property would most effectively foster the growth of a virtual economy and increase social welfare, Indonesia might need to legislate the creation of a new property regime governing the virtual property. There should be any regulation in Indonesia to define the virtual property as an object of property, and that the virtual property belongs to the movable intangible property, and how to use it as collateral for a loan. Because the first and main reason for taking security is to be able to maximize creditor's prospect of recovery in the event of debtor's insolvency, it must be clear how to perfect security interest for the virtual property and how to enforce a security interest in it in the event of default. Once the virtual property is regulated as the movable intangible property, it can be for it to be used as collateral under Law No. 42 of 1999 on Fiduciary. Other than that, to be able to use the virtual property as collateral for a loan, it's also important to decide the valuation method for the virtual property as an appraisal is always needed on secured financing.

REFERENCES:

- [1] Internet World Stats, "Top 20 Countries with the Highest Number of Internet Users," 2019. [Online]. Available: <https://www.internetworldstats.com/top20.htm>. [Accessed 23 August 2019].
- [2] Adroit Market Research, "Adroit Market Research," Adroit Market Research, 8 March 2019. [Online]. Available: <https://www.adroitmarketresearch.com/press-release/virtual-goods-market>. [Accessed 23 August 2019].
- [3] M. Quadrini, "Caveat Cloudster: Why Traditional Common Law and Civil Property Law Should Apply to Virtual Property and How It Will Change the Legal Realities of the Internet," *Dalhousie Journal of Legal Studies*, vol. 24, pp. 55-99, 2015.
- [4] W. Erlank, "Introduction to Virtual Property: Lex Virtualis Ipsa Loquitur," *Potchefstroom Electronic Law Journal*, Vol. 18, No. 7, 2015., pp. 2525-2559, 2015.
- [5] S. Chang, "Collateral Damage: Insecurity Assets in the Rising Virtual Age of E-Commerce," *Journal of Law, Technology & The Internet*, pp. 67-100, 2011.
- [6] J. M. Moringiello, "False Categories in Commercial Law: The (Ir)relevance of (In)tangibility," *Florida State University Law Review*, vol. 35, pp. 1-92, 2007.
- [7] J. Fairfield, "Virtual Property," vol. 85, pp. 1047-1102, 2005.
- [8] A. Salam, *Kebendaan Digital: Suatu Kajian Hukum Keperdataan*, Tangerang Selatan: Yayasan Pengkajian Hadis el-Bukhari Institute, 2018.
- [9] J. W. Nelson, "The Virtual Property Problem: What Property Rights in Virtual Resources Might Look Like, How They Might Work, and Why They Are a Bad Idea," *McGeorge Law Review*, vol. 41, pp. 281-310, 2010.
- [10] John S. Chao, "Recognizing Virtual Property Rights, It's About Time," *Law School Student Scholarship*, pp. 1-26, 2010.
- [11] G. Ledgerwood, "Virtually Liable," *Washington & Lee Law Review*, vol. 66, no. 2, pp. 813-855, 2009.
- [12] "Find Law," United States Court of Appeals, Ninth Circuit, 13 August 2002. [Online]. Available: <https://caselaw.findlaw.com/us-9th-circuit/1483800.html>. [Accessed 23 August 2019].
- [13] L. Bekker, "Defining Virtual Property in Terms of the Constitutional Property Clause," North-West University, Potchefstroom, 2014.
- [14] J. Frieling, "Virtual goods in online worlds," *GI-Jahrestagung*, pp. 3097- 3107, 2013.
- [15] W. Suberg, "Coin Telegraph," Coin Telegraph, 16 March 2017. [Online]. Available: <https://cointelegraph.com/news/bitcoin-is-virtual-immovable-property-china-civil-law-drafter>. [Accessed 23 August 2019].
- [16] W. Erlank, "Property in Virtual Worlds," Stellenbosch University, Stellenbosch, 2012.
- [17] B. Tampubolon, "Hukum Online," Hukum Online, 28 September 2017. [Online].

- Available:
<https://www.hukumonline.com/klinik/detail/ulasan/lt53ad34f28be56/dapatkah-nama-domain-dijadikan-sebagai-objek-jaminan>.
[Accessed 30 August 2019].
- [18] L. C. Mather, *Securities Acceptable to The Lending Banker*, London: Waterlow, 1973
- [19] M. Fuady, *Hukum Jaminan Utang*. Jakarta: Erlangga, 2013.
- [20] G. McCormack, *Secured Credit under English and American Law*, Cambridge: University of Cambridge, 2004.
- [21] H. H. a. R. Kraakman, "Property, Contract and Verification: The Numerus Clausus Problem and the Divisibility of Rights," *Harvard Law and Economics Discussion Paper*, vol. 388, pp. 1-43, 2002.
- [22] K. King, "World Intellectual Property Organization," [Online]. Available: https://www.wipo.int/sme/en/documents/value_ip_intangible_assets_fulltext.html.
[Accessed 23 August 2019].
- [23] A. Raymond, "Intellectual Property as Collateral in Secured Transactions: Collision of Divergent Approaches," *Business Law International*, Vol. 10, No. 1, pp. 1-37, 2012