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**Cryptoassets
and law in
Asia**

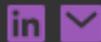


Cryptoassets and property law: Civil law edition

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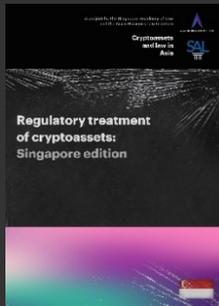
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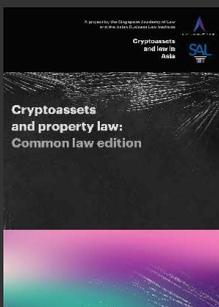
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Wendy Lin, Jiamin Leow and Mark Fisher, *Cryptoassets and civil procedure law: Singapore edition* (Asian Business Law Institute and Singapore Academy of Law, January 2023) [↗](#).



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Cryptoassets as property: China, Indonesia, Japan, Thailand, and Vietnam

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Readme

Public beta

This guide is *a beta* release. That is, it is the first time this guide has been made available to the public, but all the “bugs” are not ironed out because the law is in a state of flux.

This guide may be updated to accommodate changes by the courts and the legislature in the future.

Comments are also welcome, by contacting the author and/or contributors/editors.

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INTRODUCTION

Introduction

This report examines the treatment of cryptoassets as property under relevant laws of China,¹ Indonesia, Japan, Thailand, and Vietnam. Positioned as a supplement to the Singapore and common law editions in this report series,² this report aims to provide a broad overview of the property laws of these five Asian civil law jurisdictions³ within the comparative context and offer practical guidance on how cryptoassets are treated under those laws for a diverse range of stakeholders.

In examining the intersection of cryptoassets and property law, this report highlights fundamental and conceptual questions arising in both common law and civil law traditions, with a particular focus on contextualizing practical problems within the civil law framework. An example is whether a cryptoasset can be pledged, a question contingent on intricate legal conceptions.

The classification of an item as an "object of property rights" holds practical significance because it triggers a cascade of legal consequences. For starters, the status of property rights offers special legal protection. In most civil law jurisdictions, for example, the remedy of "vindication" (i.e., delivery of an object from the possession of another) is generally available to compel the delivery of an object of property rights.⁴ Property law status also has downstream consequences in fields such as insolvency law, criminal law, tort, commercial law, and private international law.

The "property question" thus often appears as a preliminary issue to be determined, and it is especially important in the comparative context to avoid speaking at cross purposes by starting from different assumptions about the property law status of cryptoassets. Comparative work such as this report series is particularly valuable at the present time in light of recent developments at the international level towards legal harmonisation, such as the *Principles on Digital Assets and Private Law* promulgated by the International Institute for the Unification of Private Law.⁵

It is hoped that this report sets out a common frame of reference in a manner that is accessible to the legal and business communities as well as to scholars of comparative property law.

¹ For the purpose of this report, China does not include the Hong Kong Special Administrative Region, the Macao Special Administrative Region and the Taiwan region.

² See Jason Allen, *Cryptoassets and property law: Singapore edition* (Asian Business Law Institute and Singapore Academy of Law, November 2022) [↗](#) and Jason Allen, *Cryptoassets and property law: Common law edition* (Asian Business Law Institute and Singapore Academy of Law, April 2023) [↗](#).

³ The term "civil law" is used in a broad sense in this report to include those jurisdictions, such as China, that have borrowed from the European civil law system while maintaining aspects of their own legal traditions. Such jurisdictions are sometimes referred to as "hybrid" jurisdictions by commentators for this reason.

⁴ See Christian von Bar (J.G. Allen trans.), *Foundations of Property Law: Things as Objects of Property Rights* (Oxford University Press, August 2023) at paras 3 and 28. In general, damages are deemed to be sufficient for the loss of a moveable object in common law.

⁵ International Institute for the Unification of Private Law, *Principles on Digital Assets and Private Law*, May 2023 [📄](#).

UNDERSTANDING CRYPTOASSETS

Understanding cryptoassets

Legal definition of cryptoassets

Legislatures in China, Indonesia, Japan, Thailand, and Vietnam have not taken the approach of defining “cryptoassets” specifically, although some of their regulators have provided guidance on what certain types of cryptoassets are for specific regulatory purposes, such as preventing financial and investment fraud.

Several definitions and taxonomies of “cryptoassets” have been promulgated at the level of regulatory authorities globally. Generally, those definitions are intended to clarify the regulatory position of cryptoassets under existing legislation, often legislation concerned with capital markets and financial services but also civil procedure rules or tax legislation.⁶

Table A – Definitions of “cryptoassets” around the world

Regulatory Authority	Country/Region	Definition
 FINANCIAL AND CONSUMER SERVICES COMMISSION Financial and Consumer Services Commission	Canada	Crypto assets are purely digital assets that use public ledgers over the Internet to prove ownership. They use cryptography, peer-to-peer networks and a distributed ledger technology (DLT) – such as blockchain – to create, verify and secure transactions. They can have different functions and characteristics: they may be used as a medium of exchange; a way to store value; or for other business purposes. Crypto assets generally operate independently of a central bank, central authority or government. ⁷
 EBA EUROPEAN BANKING AUTHORITY European Banking Authority	European Union	Crypto-assets are a type of private financial asset that depend primarily on cryptography and distributed ledger technology as part of their perceived or inherent value. ⁸

⁶ Jason Allen, *Cryptoassets and property law: Singapore edition* (Asian Business Law Institute and Singapore Academy of Law, November 2022) [↗](#) at p 7.

⁷ Financial and Consumer Services Commission, *Crypto assets and Cryptocurrency*, undated [↗](#).

⁸ European Banking Authority, *EBA reports on crypto-assets*, 9 January 2019 [↗](#).

Regulatory Authority	Country/Region	Definition
 Bank for International Settlements	International	Crypto assets are defined as private digital assets that depend primarily on cryptography and distributed ledger or similar technology. Digital assets are a digital representation of value, which can be used for payment or investment purposes or to access a good or service. ⁹
 Financial Stability Board	International	Crypto-assets are a type of private sector digital asset that depends primarily on cryptography and distributed ledger or similar technology. ¹⁰
 European Central Bank	European Union	A crypto-asset is “a new type of asset recorded in digital form and enabled by the use of cryptography that is not and does not represent a financial claim on, or a liability of, any identifiable entity”. ¹¹
 UK Jurisdiction Taskforce	United Kingdom	The principal novel and characteristic features of crypto assets are: (a) intangibility; (b) cryptographic authentication; (c) use of a distributed transaction ledger; (d) decentralisation; and (e) rule by consensus. ¹²

Regulatory authorities in some of the jurisdictions covered in the common law edition, such as Australia, Malaysia, and New Zealand, have also put forward definitions of “cryptoassets” in recent years. Those definitions also often concern financial, securities and tax regulations.¹³

We can see from the above that regulatory authorities are often the first point of contact and have the tendency to focus on questions of regulatory treatment over property law treatment of cryptoassets. As a result, the existing definitions may not be helpful in approaching the definition of

⁹ Basel Committee on Banking Supervision, “Prudential treatment of cryptoasset exposures”, June 2021  at p 2.

¹⁰ Financial Stability Board, Crypto-assets and Global Stablecoins .

¹¹ European Central Bank, Crypto-assets — trends and implications, June 2019 .

¹² UK Jurisdiction Taskforce, “Legal statement on cryptoassets and smart contracts”, November 2019  at p 10.

¹³ Jason Allen, *Cryptoassets and property law: Common law edition* (Asian Business Law Institute and Singapore Academy of Law, April 2023)  at pp 12-14.

cryptoassets for the purposes of *property law*.¹⁴

Zooming out, we can observe the following features that are definitive of the “core case” of cryptoassets, typified by open, public blockchains such as the bitcoin blockchain:

- **Technological features.** Cryptoassets are assets that are represented in, or arise from, a blockchain system with some level of decentralisation secured by cryptographic encryption and economic incentive design.¹⁵ It is vital to understand not only the technical and economic/social functions of the *token* but also of the *system* in which it exists. Only on this basis can we approach the regulatory and private law treatment of cryptoassets coherently.
- **Private issuance.** Cryptoassets are not issued by a public authority and not within a regulatory regime.
- **Economic function.** Cryptoassets often provide a means of payment or enable an investment for profit in a financial or commercial undertaking.

Defining cryptoassets for this report

In this report, we seek to define cryptoassets from the perspective of property law rather than any regulatory regime. Despite the wide range of cryptoassets with different use cases, forms and functions on the market, such as the use of cryptoassets as digital money, in initial coin offerings or as non-fungible tokens, it is possible to sketch out two broad categories of cryptoassets from the perspective of private law and property law in particular, at least for purposes of convenience.¹⁶

- The first category of cryptoassets includes assets such as bitcoin that do not represent any value outside the blockchain system itself.
- The second category of cryptoassets is a broad, residual category, covering all cases where the ledger is used to represent or “tokenise” some other asset — whether a contractual promise, a unit of “fiat” currency, a tangible good, an intellectual property right, or indeed another cryptoasset.

The first category poses some fundamental problems, particularly in civil law systems that follow the model set by the German civil code, such as Japan. The fundamental problem is that no legal system (in either the civil law or common law tradition) accommodates objects that are (i) intangible and (ii) do not embody rights. We will elaborate on this problem in the context of Japanese law below.

Cryptoassets in the second category are both more and less problematic. They are less problematic in that the basic threshold question of property law status is generally more easily answered: every legal system recognises *erga omnes* (property) rights in *some types* of (obligational) rights. In the civil law tradition, those “rights treated as things” are often known as *res incorporales* (“incorporeal things”). There are important national differences in their recognition and treatment, but every legal system recognises objects such as financial assets that are, at base, just rights against counterparties

¹⁴ For more detailed discussions, see Jason Allen, *Cryptoassets and property law: Common law edition* (Asian Business Law Institute and Singapore Academy of Law, April 2023) [↗](#) at pp 14-15.

¹⁵ See Guiliano Castellano, “Towards a General Framework for a Common Definition of ‘Securities’: Financial Markets Regulation in Multilingual Contexts” (2012) 17(3) *Uniform Law Review* 449 [P](#).

¹⁶ See J.G. Allen, “Cryptoassets in Private Law” in Iris Chiu and Gudula Deipenbrock (eds.), *Routledge Handbook of Fintech Law and Regulation* (Routledge 2021), Ch 17.

or rights in things. In most legal systems, including those that follow civil law traditions other than the Germanic one, *res incorporales* are recognised as “property” in the full sense, although some questions may remain around their possession and custody. Cryptoassets, as (to a lesser degree) intangible assets like patents and company shares, do not fit neatly in the conceptual universe of the relevant legal system — which may be confined by the hard edges of a codification.

For clarity, in this report, we use the term “cryptoassets” broadly to refer to all blockchain-based digital assets, but we will disambiguate wherever necessary.

UNDERSTANDING PROPERTY LAW IN THE CIVIL LAW LEGAL TRADITION

Understanding property law in the civil law legal tradition

Overview

According to one influential view, property law provides a legal foundation for the allocation of value throughout the economy through the allocation of *rights* that govern the interaction of *persons* in relation to *things*.¹⁷ Whatever cryptoassets are thought to be from a regulatory perspective, their status as *objects of property rights* is a fundamental question not only because it has important consequences in diverse areas of law (as mentioned earlier), but also because the “property question” probes the nature of cryptoassets as objects of legal dealings most directly.¹⁸ In many jurisdictions within the civil law tradition, there are complex issues in recognising purely intangible objects of property rights, so the latter point is of particular relevance.

Scholars debate what exactly makes “property rights” different from other types of rights, such as “obligational” rights.¹⁹ The traditional hallmark of property rights (often called rights *in rem*) is that they operate *erga omnes* (that is, against all third parties or “the world”, as opposed to only against transactional counterparties or on an *in personam* basis). Civil law systems often label property rights “absolute” because an owner of property holds a right against anyone (and everyone), not just a right “relative” to another party.²⁰ Sometimes, a distinction is drawn between three elements in the property law relationship: *persons*, *objects*, and *rights*. Persons have rights in objects. Those rights are enforceable against other persons and regulate access to objects of value. In general terms, it could be said that when the right in question relates to and “follows” the object to be enforceable against all persons (rather than just a contractual party or a tortfeasor), that right is a “property right”.

A significant source of difficulty in explaining the civil law tradition of property law in the English language is that the terminology used by the common law and the civil law is fundamentally different. In English, we speak of “property”. So when the relevant concept in a different language is translated into English, it is often translated as “property”. But generally, the word in question is some version of “object” or “thing”. Property law in the civil law tradition is the *law of things*, and property rights are the rights that persons can have in things that are enforceable against third parties and not just against counterparties that have bound themselves contractually, delictually, or otherwise.

Accordingly, lawyers trained in civil law systems tend to approach property law from the perspective of a more or less strict definition of “things” that determines the province of the “law of things”. There are two broad approaches in the civil law tradition, with both represented in the jurisdictions covered in this report. The two approaches diverge precisely on the “thing-ness” of intangible objects, making the property law status of cryptoassets a highly topical question.

¹⁷ See generally Christian von Bar (J.G. Allen trans.), *The Foundations of Property Law: Things as Objects of Property Rights* (Oxford University Press, August 2023), Ch 1.

¹⁸ Paul Babie, David Brown, Mark Giancaspro, and Ryan Catterwell, “Cryptocurrency and the Property Question” (Oxford Property Law Blog, 12 May 2020) [↗](#), commenting on *Ruscoe v Cryptopia Ltd (in liq)* [2020] 2 NZLR 809.

¹⁹ There are debates about whether rights over different types of property are really the same behind the label “property rights”; for example, whether the rights of the “owner” of a house are really the same as the rights of the “owner” of copyright. See Ben McFarlane and Simon Douglas, “Property, Analogy and Variety” (2022) 42(1) *Oxford Journal of Legal Studies* 161.

²⁰ See, for example, Hiroshi Oda, *Japanese Property Law* (3rd Edition, Oxford University Press 2009), 166.

“Thing-ness”

Most legal systems do recognise the existence of non-physical things. In Roman law, on which today’s civil law legal systems are largely based, so-called *res incorporales* were rights treated as patrimonial assets (i.e., assets constituting an identifiable body or fund associated with a person). Roman law *res incorporales* were things which cannot be touched, consisting of rights, and are therefore incapable of possession and delivery. In the classical exposition of Roman law, examples are given of usufructs (the right to use another’s land and enjoy its fruits), obligations, and servitudes (a right to use another’s land such as a right of way). Drawing on this basis, many civil law codifications are liberal with the concept of “property rights” and their objects. Anything that is of value and is not a person can be an object of property rights.

Some civil law legal systems, which follow the approach taken by the drafters of the German civil code in the late 19th century, adopt a different interpretation that does not allow for the existence of *res incorporales*. These legal systems recognise that incorporeal assets may be objects of value, and may be objects of legal transactions such as contracts. However, incorporeal assets may not be the objects of all “property rights” and are, in particular, not fitting objects of the ultimate property right — the right of ownership which confers the fullest rights that one can enjoy in relation to things.

Jurisdictions in the latter family, which include Japan, and to a lesser extent China, are typically more structured and systematic in defining the concept of “property law” from the concept of “thing”. This makes the definition of what is, and what is not, a “thing” very important; only a thing can be the object of the ultimate property right — the right of ownership.

For example, the Tokyo District Court had to decide whether bitcoins were “things” within the meaning of the law in the now well-known *Mt Gox Case* of 2015.²¹ In that case, a customer sued a bankrupt cryptoasset exchange, seeking the delivery of “his” bitcoins from the trustee in bankruptcy. The customer based his claim on an argument of *ownership*: his bitcoins should be segregated from the bankruptcy estate and transferred to him under the relevant provision of the Japanese insolvency law. The court, however, held that bitcoins which are intangible records in an electronic ledger were not “things” under Article 85 of the Japanese civil code which stipulates that “things” are categorically spatio-temporal, tangible objects only. Following the Japanese civil code, only objects that qualify as “things” can be objects of the right of ownership — although non-things of value can be objects of “limited” property rights.²²

There has been debate in Japanese law about whether this approach to the “ownership” of “things” is too restrictive for the digital age. Alternatives have been suggested, including the treatment of cryptoassets as patrimonial rights (along with, e.g., intellectual property rights and shares) which would make certain default rules of property law (although not necessarily those in respect of ownership) applicable to cryptoassets.²³

In summary, the position is somewhat complex — especially in jurisdictions like Japan that define

²¹ n° 2014(wa)33320 (Tokyo District Court, 5 August 2015). An unofficial English translation of the judgment is available at [D](#).

²² This case is summarised in Low, Kelvin F.K. and Hara, Megumi, “Cryptoassets and Property” (8 May 2022) [↗](#).

²³ Tetsuo Morishita, “FinTech-jidai no kinyūhou no arikata ni kansuru jyosetuteki-kentou” (An Introductory Examination of the Financial Law of the Fintech Era) in Etsuro Kuronuma and Tomotaka Fujita (eds), *Kigyohou no shinro (Path of Corporate Law)* (Tokyo: Yūhikaku, 2017) 771; Hiroki Morita, “Kasou Tsūka no Shihoujyō no seishitsu nitsuite” (On the Private Law Nature of Cryptocurrencies) 2095 *Kinyūhoumujijyō* 14, both cited in Low, Kelvin F.K. and Hara, Megumi, “Cryptoassets and Property” (8 May 2022) [↗](#).

“thing-ness” strictly by reference to “corporeality”. In the comparative context, the catalogue of objects that are protected as “property” or “things” in different legal systems is quite heterogeneous. More importantly, the taxonomy of objects of property rights is continuously evolving. However, that evolution is fragmented across different legal systems within the civil law tradition, particularly between jurisdictions such as Japan that have adopted a concept of “thing” which is restricted to corporeal assets and those that also extend the concept of “things” to incorporeal objects.²⁴

The hierarchy of property rights and the *numerus clausus* principle

Generally, “ownership” is defined in an absolute sense in the civil law tradition, derived from the Roman law concept of *dominium*. This principle is formulated in different ways in different civil law legal systems. The French civil code, for example, stipulates that “[o]wnership is the right to enjoy and dispose of things in the most absolute manner, provided they are not used in a way prohibited by statutes or regulations”.²⁵ The German civil code states that “[t]he owner of a thing may, to the extent that a statute or third-party rights do not conflict with this, deal with the thing at his discretion and exclude others from every influence”.²⁶ Typically, ownership can be held jointly by more than one person, but ownership itself is “indivisible” (i.e., cannot be divided). Rather, a limited number of lesser property rights can be hived off by the owner and granted to others. These approaches are reflected in Asia in various codifications, often, however, with hybrid influences and a local inflection.

In some systems, “limited” property rights are seen as *fragments* of the right of ownership, while in others they are seen as *encumbrances* on the right of ownership because fragmentation would violate the principle of “indivisibility” of ownership.²⁷ In either case, beneath the overarching, absolute right of ownership, a raft of lesser property rights is generally elaborated. Variability exists between national codifications, but generally this raft of lesser property rights includes rights such as usufructs, servitudes, mortgages and hypothecs, pledges, etc.

In varying degrees of strictness, civil law legal systems also tend to operate with some version of the *numerus clausus* principle — the idea that there is (i) a limited number of *objects* in which property rights can be held and (ii) a limited number of *rights* that can be held in those objects. Similarly, this principle is strictest in legal systems influenced by the German civil code. However, generally all civil law codifications spell out a list of property rights that is *prima facie* exhaustive — in general, parties are not free to stipulate that some object is “property” by private agreement. Nor are they free to create new types of rights in an object that are not recognised by law. For example, if a civil code defines a pledge as requiring possession of the underlying thing, parties are not able to create a new type of pledge right that is non-possessory.

Although the absolute concept of ownership and the *numerus clausus* principle are usually recited in fairly strict terms, the law must always remain responsive to the society and the economy it regulates. Despite important differences in this regard, market-based innovations have influenced the law to a greater or lesser extent in all civil law legal systems. Cryptoassets as potential objects of

²⁴ Sabrina Praduroux, “Objects of Property Rights: Old and New” in Michele Graziadei and Lionel Smith (eds.), *Comparative Property Law — Global Perspectives* (Edward Elgar 2017), 69.

²⁵ Code Napoléon (effective 21 March 1804) Art 544 [↗](#).

²⁶ Bürgerliches Gesetzbuch (effective 1 January 1900) §903 [↗](#).

²⁷ See Michele Graziadei, “The Structure of Property Ownership and the Common Law/Civil Law Divide” in Michele Graziadei and Lionel Smith (eds.), *Comparative Property Law — Global Perspectives* (Edward Elgar 2017), 82.

property rights may possibly challenge both aspects of the *numerus clausus* principle:

- First, they may be a new type of object in which property rights might be held.
- Second, distributed ledger technology and blockchain may enable new transactional structures that do not fit squarely within the list of permissible property rights enumerated by the relevant legislation.

UNDERSTANDING PROPERTY LAW TREATMENT OF CRYPTOASSETS IN CHINA, INDONESIA, JAPAN, THAILAND, AND VIETNAM

Understanding property law treatment of cryptoassets in China, Indonesia, Japan, Thailand, and Vietnam

Overview

In this part, we elaborate on the property law treatment of cryptoassets in China, Indonesia, Japan, Thailand, and Vietnam. For each jurisdiction, we (i) set out the basic approach of its law to “property”, “things” and “ownership” before moving onto (ii) issues of possession and custody which are often directly determinative of (iii) the types of security rights that can be created and the manner in which they are created and dealt with. We will concurrently examine how findings and discussions in these three aspects apply to cryptoassets.

At the outset, it is helpful to make some global observations across these five jurisdictions.

In very broad terms, and with important qualifications, these five jurisdictions can be distinguished based on their approach to intangible objects as fully-fledged objects of property rights — particularly the right of ownership. Despite considerable differences in their legal history and their reception of the Roman law-based civil law tradition, in their modern condition both Chinese and Japanese law draw, to a certain extent, on the German pandectist²⁸ approach of defining the objects of property rights restrictively by referring to the corporeality criterion. In China and Japan, issues arise concerning whether cryptoassets can be “owned” as the right of ownership is defined technically in the relevant codes, as well as around possession, custody and the creation of security rights. Thailand adopts a hybrid approach which restricts the concept of “thing” to tangible objects but also recognises intangible forms of “property”. On the other hand, Indonesia and Vietnam take a more flexible approach when it comes to intangible objects of property rights.

All of these five jurisdictions face some difficulty in applying the conventional concept of “possession” to intangible property. In this respect, the question to be answered is whether the concept of possession should be amended or “stretched” to cover intangible property that exists in the form of electronic financial records, or whether an alternative concept should be developed that plays a similar functional role to possession.

Several global initiatives have suggested a concept of “control” in place of possession as a kind of functional analogue. The *UNCITRAL Model Law on Transferable Electronic Records* is one such example.²⁹ The Law Commission of England and Wales has discussed the parallel problem in the common law — namely, that intangible objects cannot be “possessed” in the traditional sense — and suggested a concept of “factual control” as a substitute for what it calls “data objects”.³⁰

²⁸ Pandectist is the term used to refer to 19th century German scholars of Roman law in the model of “conceptual jurisprudence” based on their reading of the Pandects of Justinian, the core source of classical Roman civil law.

²⁹ UNCITRAL Model Law on Transferable Electronic Records (13 July 2017) Art 11 [↗](#).

³⁰ See generally Law Commission of England and Wales, Digital Assets Final report (Law Com No 412) (28 June 2023) [↗](#).

China*

What is property under the law?

The *Civil Code of the People's Republic of China*³¹ (**Civil Code**) is the first comprehensive civil code in China. Property law, which was dealt with in stand-alone pieces of legislation, is now found in Book Two of the Civil Code. Book Two of the Civil Code is itself supplemented by, among others, the *Interpretations (1) of the Supreme People's Court on the Application of the Book on Property Rights of the Civil Code of the People's Republic of China*³² and the *Interpretations of the Supreme People's Court on the Application of the Relevant Guarantee System of the Civil Code of the People's Republic of China*.³³

These provisions do not directly define but enumerate different types of property rights. Nor do they contain specific provisions on the objects of civil rights.

Under Chinese law, “things” are defined as immovables and movables,³⁴ and “the owner of an immovable or movable has the right to possess, use, enjoy and dispose of such an immovable or movable in accordance with the law.”³⁵ Real rights, or rights “in things”, in Book Two of the Civil Code are organised in five parts, namely General Provisions, Ownership, Usufruct, Security Interests and Possession.

The characteristic of the civil law tradition of the Civil Code can be seen in its strict adherence to the *numerus clausus* principle,³⁶ under which the legislature has exclusive authority to define and regulate the categories and the contents of property rights, including the power to establish any new type of property rights.³⁷ Having said that, the Civil Code does leave room for other laws to establish

* We are grateful for the contribution by Dr Andrew Godwin (Associate Professor, University of Melbourne Law School), Tony Song (then Research Fellow, NSW Law Society's Future of Law and Innovation research stream at UNSW Law & Justice), Dr Max Parasol (then Research Fellow, RMIT Blockchain Innovation Hub) and Dr Binghua Duan (Associate Professor, Zhongnan University of Economics and Law).

³¹ Civil Code of the People's Republic of China (《中华人民共和国民法典》) (issued on 28 May 2020 and effective on 1 January 2021) [↗](#).

³² Interpretations (1) of the Supreme People's Court on the Application of the Book on Property Rights of the Civil Code of the People's Republic of China (《最高人民法院关于适用《中华人民共和国民法典》物权编的解释(一)》) (issued on 29 December 2020) [↗](#).

³³ Interpretations of the Supreme People's Court on the Application of the Relevant Guarantee System of the Civil Code of the People's Republic of China (《最高人民法院关于适用《中华人民共和国民法典》有关担保制度的解释》) (issued on 31 December 2020) [↗](#).

³⁴ Civil Code of the People's Republic of China (《中华人民共和国民法典》) (issued on 28 May 2020 and effective on 1 January 2021) Art 115 [↗](#).

³⁵ Civil Code of the People's Republic of China (《中华人民共和国民法典》) (issued on 28 May 2020 and effective on 1 January 2021) Art 240 [↗](#).

³⁶ Some scholars have advocated for the easing of this principle. See for example, Zhang Zhipo, “Possibility and Its Boundary of Numerus Clausus Relaxation”, *Comparative Law Research*, No. 1, 2017 at pp 157-169; Yang Lixin: “The Real Right of Civil Law should Stipulate the Principle of Numerus Clausus Relaxation”, *Tsinghua Law School*, No. 2, 2017 at pp 14-27.

³⁷ Civil Code of the People's Republic of China (《中华人民共和国民法典》) (issued on 28 May 2020 and effective on 1 January 2021) Art 116 [↗](#).

or recognise property rights,³⁸ and a creditor may create a security interest in accordance with the Civil Code or other laws.³⁹

Are cryptoassets property under the Civil Code?

Despite not qualifying as “things” within the strict approach set out in the Civil Code, there have been developments in Chinese law towards recognising virtual objects as having qualified property status. For example, the Civil Code has brought “network virtual property” into the scope of civil legislation for the first time under Article 127 which states “where any laws provide for the protection of data and network virtual property, such laws shall apply”. Article 127, however, does not expressly provide that network virtual property attracts property rights.

From a regulatory perspective, Chinese regulators have intentionally drawn a line between bitcoin, other cryptocurrencies and blockchain technology. Bitcoin was classified in 2013 by some regulators as a “virtual commodity”,⁴⁰ while risk warnings were issued against other cryptocurrencies subsequently.⁴¹ In 2019, the so-called “DC/EP” (Digital Currency Electronic Payment) cryptocurrencies traded on the market were found to be illegal on suspicion of them being used for fraud and pyramid schemes. Other cases have also characterised transactions involving cryptocurrencies as constituting the crime of fraud and refused to recognise the legal effect of cryptocurrency trading contracts.⁴² These developments culminated in a multi-agency announcement in September 2021 that virtual currency-related activities are illegal financial activities.⁴³

Since virtual property is a combination of ownership, creditors’ rights and other rights with monetary

³⁸ Civil Code of the People’s Republic of China (中华人民共和国民法典) (issued on 28 May 2020 and effective on 1 January 2021) Art 115 [↗](#).

³⁹ Civil Code of the People’s Republic of China (中华人民共和国民法典) (issued on 28 May 2020 and effective on 1 January 2021) Art 387 [↗](#).

⁴⁰ Notice of the People's Bank of China, the Ministry of Industry and Information Technology, the China Banking Regulatory Commission, the China Securities Regulatory Commission and the China Insurance Regulatory Commission on Preventing Bitcoin Risks (Yin Fa 289 [2013]) (中国人民银行、工业和信息化部、中国银行业监督管理委员会、中国证券监督管理委员会、中国保险监督管理委员会关于防范比特币风险的通知) (3 December 2013) [↗](#).

⁴¹ Risk Warning of the People's Bank of China on Issuing or Promoting Digital Currencies by Fraudulently Using the Name of the People's Bank of China (关于冒用人民银行名义发行或推广数字货币的风险提示) (15 June 2017). See also Announcement of the People's Bank of China, the Office of the Central Leading Group for Cyberspace Affairs, the Ministry of Industry and Information Technology and Other Departments on Preventing the Financing Risks of Initial Coin Offerings (工商总局等七部门关于防范代币发行融资风险的公告) (4 September 2017).

⁴² See Supreme People's Procuratorate of the People’s Republic of China, “Eleven Model Cases for Adequately Performing Procuratorial Functions in Furtherance of Cyberspace Governance” (充分发挥检察职能、推进网络空间治理典型案例) (25 January 2021) [↗](#).

⁴³ Notice of the People's Bank of China, the Cyberspace Administration of China, the Supreme People's Court, the Supreme People's Procuratorate, the Ministry of Industry and Information Technology, the Ministry of Public Security, the State Administration for Market Regulation, the China Banking and Insurance Regulatory Commission, the China Securities Regulatory Commission and the State Administration of Foreign Exchange on Further Preventing and Resolving Risks of Virtual Currency Trading and Speculation (Yin Fa 2021 No. 237) (关于进一步防范和处置虚拟货币交易炒作风险的通知) (15 September 2021) [↗](#).

value, it should arguably fall within the scope of property.⁴⁴ Court decisions suggest that cryptocurrencies are essentially the same as property rights because a cryptocurrency involves human labour and has the characteristics of scarcity, use rights and exchange value.⁴⁵ In short, cryptoassets create economic interests in transactions, and it is reasonable and necessary to protect property interests in cryptoassets under private law. However, the ways by which the law protects cryptoassets need to be developed, including whether such assets should be protected by intellectual property law or other laws (for example, securities law in the event that investment interests are created in cryptoassets).

Although cryptoassets are unlikely to be treated as “things” under the Civil Code at present, there is room for their development as objects of certain rights. Whether cryptoassets should be defined as property rights, creditors’ rights (i.e., contractual debts), intellectual property, other investment rights in financial transactions, special commodities or simply “network data” is a topic of continuing debate. The answer is likely to depend either on future legislative amendments modifying the categories of recognised “things” under the Civil Code or on judicial interpretations.

Possession

Under Chinese law, possession is the actual management and control of property. It is a factual state rather than a right. This is because the possessor of property is not required to have any pre-existing right over the property. Therefore, possession of property can be fully separated from the rights attached to property.

Among others, possession functions to provide a basis for the recognition or expression of rights (such as ownership, usufruct, security interests and creditors’ rights), to provide a basis for the acquisition of a right (e.g. to possess unoccupied property), and to serve as the burden of an obligation (e.g., the return of property pursuant to the principle of unjust enrichment). It has been said that the purpose of protecting possession is to protect the rights in ownership, usufructs, security interests and creditors’ rights.⁴⁶

How does possession apply to cryptoassets?

Based on the descriptions above, if the rights in respect of a cryptoasset can be recorded and circulated, the control and possession of the cryptoasset by the rights holder can be protected. However, this requirement may be difficult to meet subjectively, and technologies like blockchain may need to be depended on to ensure that control over a cryptoasset can achieve some exclusivity and independence in the virtual world. When it comes to cryptocurrencies specifically, some academics have argued that claims in respect of cryptocurrencies should be treated in the same way as monetary claims.⁴⁷ At present, given its virtual nature, the conclusive determination of who controls a cryptoasset would require a method of registration that is similar to real estate registration.

As the trading of cryptoassets inevitably involves various property rights and creditors’ rights, what the legal system needs to do is to balance the interests of the holders of those various rights. It is

⁴⁴ Mei Xiaying and Xu Ke, “On the Theoretical and Legislative Issues of Inheritance of Virtual Property”, *Jurists*, 2013 (06) (梅夏英、许可《虚拟财产继承的理论及立法问题》*法学家*, 2013, 141 (06)).

⁴⁵ Lin Shengchao and Lin Haizhen, “Criminal Law Regulation of Illegal Transfer of Cryptocurrency”, *The Chinese Prosecutors*, 2021 (18) at p 67.

⁴⁶ Chen Huabin, “A Study on Possession Rule in Property Volume of China’s Civil Code Legislation”, *Modern Law*, 2018, 40(01) at pp 43-53.

⁴⁷ Feng Jieyu, “On the Normative System of Digital Currency in Private Law”, *Journal of Politics and Law*, 2021(7) at pp 133-149.

generally recognised that the core objective of the legal system should be to protect reasonable economic interests and ensure the security and proper functioning of trading and the market, so as to promote the healthy development of the economy. It is therefore important to achieve a balance between absolute rights and relative rights in respect of cryptoassets. Relevantly, the Civil Code prohibits the abuse of civil rights to harm the interests of the State, public interest, or the legitimate rights and interests of others.⁴⁸

Security interests

Under the Civil Code, security interests over assets are determined by reference to their functions rather than to how they are categorised. This approach has enabled “non-classical” arrangements of security interests, such as retention of title and financial lease, to be treated as security, with “classic” security interests, namely mortgage, pledge and lien, being regulated specifically under the Civil Code.

Despite strict requirements on the range of property over which security interests can be created, the Civil Code has, in effect, a relatively open system for the creation of security interests by allowing parties to enter into contracts that have a security function,⁴⁹ while at the same time attempting to eliminate invisible security interests (for example by requiring arrangements involving retention of title or financial lease to be registered).

Mortgage

A mortgage is a non-possessory form of security over an asset, under which the creditor may dispose of the asset upon default by the debtor, subject to complying with statutory requirements which may include the obtaining of a court order.

It has been suggested that data interests and other digital property can be included in the category of “other property over which mortgage is not prohibited by law” under Article 395 of the Civil Code and can therefore be subject to a chattel mortgage.⁵⁰

Pledge

A pledge is a form of security under which the pledgor actually or symbolically transfers possession of the pledged property to the pledgee but retains ownership of that property. A pledge is established upon its perfection, i.e., when the pledged property is delivered by the pledgor.⁵¹ Therefore, an act of delivery is required. The Civil Code does make provision⁵² for non-actual delivery

⁴⁸ Civil Code of the People’s Republic of China (中华人民共和国民法典) (issued on 28 May 2020 and effective on 1 January 2021) Art 132 [↗](#).

⁴⁹ Civil Code of the People’s Republic of China (中华人民共和国民法典) (issued on 28 May 2020 and effective on 1 January 2021) Art 388 [↗](#).

⁵⁰ Xie Hongfei, “Guarantee Capacity of Property: Limitations and Expansions”, *Journal of Social Sciences* at pp 1-11 (30 October 2022) [↗](#). Another possible way to create a security interest over data interests and other digital property is through a combination of security interests, such as a floating mortgage, a pledge of accounts receivable and a pledge of bank accounts. See Ji Hailong, “The Consensual Approach to Extending Security Interests in Personal Property Proceeds”, *Modern Law*, 222, 44(03) at pp 3-18.

⁵¹ Civil Code of the People’s Republic of China (中华人民共和国民法典) (issued on 28 May 2020 and effective on 1 January 2021) Art 429 [↗](#).

⁵² Civil Code of the People’s Republic of China (中华人民共和国民法典) (issued on 28 May 2020 and effective on 1 January 2021) Arts 226, 227 and 228 [↗](#).

to deal respectively with scenarios such as (i) where the creditor already has possession of the pledged property; (ii) where a third party has possession of the pledged property and the debtor transfers to the creditor the right of restitution against the third party; and (iii) where the parties agree that the debtor shall retain modified possession rights.

The perfection of a pledge over tangible movable property can be accomplished by the pledgor transferring possession of the property to the pledgee.⁵³ A constructive delivery of the property, under which only possession of the property's title document is transferred, is also acceptable. Documents of title are thus essential in many financing transactions. The requirements for perfection of a pledge over a financial instrument vary depending on the type of the underlying financial instrument. Some examples are given below.⁵⁴

- Negotiable instruments: perfection is accomplished through a pledge endorsement on the instrument. Possession of the endorsed instrument is then transferred to the pledgee.
- Exchange-traded bonds: perfection is accomplished through registration with the China Securities Depository and Clearing Company Limited (CSDCC).
- Bonds traded on the interbank bond market, or over-the-counter bonds: perfection is accomplished through registration with the China Government Securities Depository Trust & Clearing Co Limited., or any other designated bond clearing and custody registry.
- Exchange-traded fund units: perfection is accomplished through registration with the CSDCC.
- Shares in a listed company: perfection is accomplished through registration with the CSDCC.
- Equity interests in a limited liability company or shares in an unlisted company limited by shares: perfection is accomplished through registration with the local market regulator.

Data and network virtual property fall outside the category of “other property rights that can be pledged under laws or administrative regulations”,⁵⁵ but can be included in the category of “property over which mortgage is not prohibited by law” as stated above.

Lien

When the debtor fails to perform its obligations, a creditor may retain the debtor's movable property which is already in its lawful possession and enjoy priority in respect of the proceeds from the sale of that movable property.⁵⁶ In this scenario, the creditor is the lienholder, and the movable property in its possession is the property under lien.

No lien can be exercised over a piece of movable property if a lien is prohibited by law or if the

⁵³ Civil Code of the People's Republic of China (中华人民共和国民法典) (issued on 28 May 2020 and effective on 1 January 2021) Art 429 [↗](#).

⁵⁴ Civil Code of the People's Republic of China (中华人民共和国民法典) (issued on 28 May 2020 and effective on 1 January 2021) Item (7) of Art 440 [↗](#).

⁵⁵ Civil Code of the People's Republic of China (中华人民共和国民法典) (issued on 28 May 2020 and effective on 1 January 2021) Arts 388, 440, 441, 442 and 443 [↗](#).

⁵⁶ Civil Code of the People's Republic of China (中华人民共和国民法典) (issued on 28 May 2020 and effective on 1 January 2021) Art 447 [↗](#).

parties have agreed not to create a lien.⁵⁷

Other contracts that have a security function

Beyond these three classic security interests, proprietary security rights can be established through “other contracts that have a security function”.⁵⁸ Some examples of security arrangements that fall into this category include arrangements that involve retention of ownership, financial leases and assignment security.⁵⁹

This category of security interests is considered to mitigate the *numerus clausus* principle of proprietary security rights and to establish a more open system for secured transactions.⁶⁰ Its apparent effect is that the formality of a secured transaction is no longer an obstacle to the creation of proprietary security interests. For example, a financial lease will have rights that are equal to a charge.⁶¹

Can security interests be created over cryptoassets under Chinese law?

From the discussions above, we can observe two overall paths for security interests to be created over cryptoassets under Chinese law.

First, if security interests over cryptoassets are to be recognised as among the three classic security interests, they are more likely to take the form of pledges over rights or the form of mixed security. It is important to note that the method of perfecting a pledge by constructive delivery is not possible for cryptoassets as such assets have no document of title. Analogies may, however, be drawn by referencing the requirements for perfection of pledges over financial instruments (see above). If the possibility of possessing virtual property is recognised by law, then a lien over cryptoassets would become possible.

Second, it may be possible to interpret security interests over cryptoassets as security rights established by parties through agreement, i.e., as non-classical security interests. For this to happen, it would be necessary to establish that a cryptoasset has the following characteristics: it is a type of property rights; the rights holder has the right to dispose of the property rights; and, the security interest can be publicized.⁶² At the public law level, it may also be necessary to prove that creating security interests over the cryptoasset is not against public interest and market order.

⁵⁷ Civil Code of the People’s Republic of China (中华人民共和国民法典) (issued on 28 May 2020 and effective on 1 January 2021) Art 449 [↗](#).

⁵⁸ Civil Code of the People’s Republic of China (中华人民共和国民法典) (issued 28 May 2020 and effective on 1 January 2021) Art 388(1) [↗](#).

⁵⁹ Interpretations of the Supreme People's Court on the Application of the Relevant Guarantee System of the Civil Code of the People's Republic of China (最高人民法院关于适用〈中华人民共和国民法典〉有关担保制度的解释) (issued on 31 December 2020) Art 1 [↗](#).

⁶⁰ Jing Zhang, “Recent Developments in the Law of Secured Transactions of Movables under the New Chinese Civil Code” (2021) 26(1) *Uniform Law Review* 191, 195.

⁶¹ Civil Code of the People’s Republic of China (中华人民共和国民法典) (issued on 28 May 2020 and effective on 1 January 2021) Art 414(1) and (2) [↗](#).

⁶² Registration is one way to achieve “publicity”.

Indonesia*

What is property under the law?

Indonesia has a mixed legal system with influences from Dutch colonial law, customary law and religious law.⁶³ For present purposes, the influence of Dutch civil law is the most relevant. The Indonesian Civil Code (ICC) is based on the Dutch *Burgerlijk Wetboek* of the colonial era. The Dutch code drew⁶⁴ a strict contrast between real rights (rights *in rem* or *hak kebendaan*) and personal rights (rights *in personam* or *hak perorangan*, such as contractual rights). Provisions on property in the colonial Dutch code were arranged around the principle of ownership.⁶⁵

The ICC defines “assets” (*zaak* or *benda*) as all goods and rights that can be owned,⁶⁶ and states that “assets” can be tangible or intangible.⁶⁷ Thus, under Indonesian law, the scope of “assets” includes intangibles, namely “rights” such as the right to receive payments, security rights (e.g., pledge or *fiducia* security), and intellectual property rights. Anything that can be an object of ownership rights (*hak milik*) falls within the definition of assets under the ICC. This general principle means that Indonesian private law is fairly accommodating in relation to cryptoassets.

Apart from distinguishing assets based on form, the ICC also distinguishes assets by movability. There are immovable assets and movable assets. Immovable assets are land and things attached to land (such as buildings and industrial plants), although they may also include things that might otherwise be moveable assets which are assets that are associated with land but not actually attached to it. Fixtures in a house and machinery in a factory are examples.

Moveable assets, on the other hand, include those that are moveable by their nature⁶⁸ and those that are deemed to be moveable by law.⁶⁹ Assets that are moveable by deeming include: rights of use in moveable assets and rights of use in proceeds from moveable assets; claims over money or moveable assets; intellectual property rights; receivables; and, financial instruments of various types.

Are cryptoassets property under the ICC?

From a regulatory perspective, cryptoassets are treated as commodities by Indonesia’s Commodity Futures Trading Regulatory Agency which defines a cryptoasset as an intangible commodity that is in digital form and that utilises cryptography, information technology and distributed ledgers for the

* We are grateful for the contribution by Zacky Zainal Husein (Partner, Assegaf Hamzah & Partners), Daniar Supriyadi (Associate, Assegaf Hamzah & Partners) and Lewi Aga Basoeki (Managing Associate, Widyawan & Partners in association with Linklaters).

⁶³ Hanim Hamzah, Agnesya M. Narang and Anggi Yusari, “Legal Systems in Indonesia: Overview” (1 April 2021) [↗](#).

⁶⁴ The Indonesian Civil Code is based on the 19th century version of the Dutch civil code despite modifications of the latter.

⁶⁵ Gerrit Meijer, “Influence of the Code Civil in the Netherlands”, *European Journal of Law and Economics*, 14 227–236 (2002) (November 2002) [↗](#).

⁶⁶ Indonesian Civil Code (promulgated by publication of April 39 1847 S.NO. 23) Art 499 [↗](#).

⁶⁷ Indonesian Civil Code (promulgated by publication of April 39 1847 S.NO. 23) Art 503 [↗](#). See also Law No. 7 of 2014 on Trade (as amended) which defines goods as “every object, whether tangible or intangible, whether in motion or stationary, whether consumable or non-consumable, and can be traded, used, utilised, or exploited by consumers or businesses.”

⁶⁸ Indonesian Civil Code (promulgated by publication of April 39 1847 S.NO. 23) Art 509 [↗](#).

⁶⁹ Indonesian Civil Code (promulgated by publication of April 39 1847 S.NO. 23) Art 511 [↗](#).

creation of a new unit, enabling verification and securing transactions without any third party's interference.⁷⁰ Cryptoassets are also treated as commodities for tax purposes.⁷¹

Given the treatment of cryptoassets as commodities above and in light of the broad definition of movable assets under the ICC which covers claims and book-entry debt securities, cryptoassets can best be seen as falling under the category of movable assets by deeming.

Generally, a cryptoasset holder has rights similar to those held by any other property owner. Those rights include two primary property rights.⁷² First is the right to encumber such asset or grant security interests over such asset (e.g., by way of pledge or *fiducia* security) to others. Second is the right to enjoy the property (e.g., as an owner in possession of the property). A property owner can exercise those rights against anyone.

Thus, the owner of a cryptoasset has the right to: (i) be recorded as the owner of that cryptoasset; (ii) obtain title of the cryptoasset; (iii) enjoy or cultivate the cryptoasset (whatever that is taken to mean); and (iv) maintain possession of the cryptoasset, and in the event that the cryptoasset is lost, reinstate its possession. These rights are also exercisable against anyone. However, like owners of any other type of property, the owner of a cryptoasset is subject to applicable regulatory limitations in Indonesia. For example, a cryptoasset owner is prohibited from using or promoting the cryptoasset as a payment instrument.⁷³

Possession

Despite a broadly permissive legal framework, questions arise around the concept of "possession" of cryptoassets, with flow-on implications such as the types of possessory remedies available and the types of security interests that can be created on cryptoassets and granted to others.

Possession works differently in the case of moveable and immoveable assets. As most of the provisions of the ICC that deal with the boundary between moveable and immoveable assets concern objects such as house fixtures that could be considered as parts of the house (immoveable) rather than independent parts (moveable), those provisions are unfortunately of little relevance to cryptoassets.

The basic method for transferring a tangible moveable asset (such as a good) takes the form of a physical handover of the asset by the owner to the transferee.⁷⁴ This process envisages a single handover carried out by, or on behalf of, the owner. The transfer of an intangible asset, such as receivables, is done by executing a deed of transfer between the transferor and the transferee. Such transfer shall have no consequences with respect to the debtor, until it is notified thereof, or if it has

⁷⁰ Regulation No. 8 of 2021 on Guidelines for the Implementation of Crypto Asset Physical Market Trading in the Futures Exchange (*Pedoman Penyelenggaraan Perdagangan Pasar Fisik Aset Kripto di Bursa Berjangka*) Art 1, para 7. The term "commodity" itself is defined under Law No. 32 of 1997 on Commodity Future Trading (as amended by Law No. 11 of 2011 and Law No. 4 of 2023 on Financial Sector Development and Reinforcement) as any marketable goods, services, rights, interests, and any derivative of those items that are subject to futures contracts, *sharia* derivative contracts, or other derivative contracts.

⁷¹ Ministry of Finance of Indonesia, MoF Regulation No.68/PMK.03/2022 (PMK-68) (issued on 30 March 2022; effective on 1 May 2022).

⁷² Indonesian Civil Code (promulgated by publication of April 39 1847 S.NO. 23) Art 570 [↗](#).

⁷³ See, for example, Law No. 7 of 2011 on Currency as lastly amended by Law No. 1 of 2023 on Criminal Code, Art 23, Bank Indonesia Regulation No. 17/3/PBI/2015 on Obligation to Use Rupiah in Indonesia, and Bank Indonesia Regulation No. 23/6/PBI/2021 on Payment System Service Providers.

⁷⁴ Indonesian Civil Code (promulgated by publication of April 39 1847 S.NO. 23) Art 612 [↗](#).

accepted the transfer in writing or has acknowledged it.⁷⁵

How does possession apply to cryptoassets?

As mentioned above, cryptoassets are best seen as intangible movable assets by deeming (rather than by nature). Thus, the legal arrangements applicable to the transfer of scripless shares may be applied to cryptoassets by way of analogy. A cryptoasset first needs to be transferred from one wallet to another, and such transfer must be recorded in a depository system (in this case, on all relevant ledgers). Possession of the cryptoasset is achieved through a central depository system, and all actions related to the cryptoassets are recorded centrally under that depository system.

Security interests

Among the security interests recognised under the ICC, several of them (such as mortgage or *hak tanggungan*) are not relevant because they are restricted to immovable assets. The two security interests that may apply to cryptoassets are pledge (*gadai*) and *fiducia* security (*jaminan fidusia*).

Pledge

Under the ICC,⁷⁶ a pledge is a security interest that can be created over movable assets and involves delivery of the possession of the pledged asset to the pledgee (for tangible movable assets), or in the case of intangible assets, the notification to the holder of the assets that the assets are being pledged. A pledge is considered a right *in rem* because it can be enforced against anyone, and the holder of the pledge is the only party who can exercise the powers granted to it under the ICC with respect to the pledged asset. Thus, a pledge is an absolute and exclusive right.

To create a pledge, the parties will generally enter into a pledge agreement under which the pledgor delivers the (deemed) possession of the pledged asset to the pledgee. There is no requirement for a pledge to be recorded in any public register. However, for a pledge over intangible property to be established, the party against whom the pledge is to be enforced must be notified of the pledge.⁷⁷

Fiducia security

A *fiducia* security is a security interest over a movable asset secured as a collateral for credit, where the movable asset remains under the physical control of the debtor (as the *fiducia* grantor) but ownership of that asset is handed over based on trust (*kepercayaan*)⁷⁸ to the creditor (as the *fiducia* grantee). Thus, in contrast to a pledge, there is no requirement to remove a movable asset from the debtor's possession for a *fiducia* security to be created.

To create a *fiducia* security, the debtor and the creditor need to sign a *fiducia* security deed in Bahasa Indonesia before an Indonesian notary. The *fiducia* security deed should specify the amount being secured and state that the *fiducia* grantor transfers its ownership in the relevant asset to the *fiducia* grantee. The *fiducia* grantor transfers its ownership in the asset for the period during which the debt under the agreement remains outstanding. The *fiducia* grantor retains possession of the asset and can use or dispose of the asset as normal in the ordinary course of business. A *fiducia* security must be registered by the *fiducia* grantee with the relevant authority. Like a pledge, a *fiducia*

⁷⁵ Indonesian Civil Code (promulgated by publication of April 39 1847 S.NO. 23) Art 613 [↗](#).

⁷⁶ See generally Indonesian Civil Code (promulgated by publication of April 39 1847 S.NO. 23) Arts 1150 to 1160 [↗](#).

⁷⁷ Indonesian Civil Code (promulgated by publication of April 39 1847 S.NO. 23) Art 1153 [↗](#).

⁷⁸ Despite its translation as “trust” in English, *kepercayaan* should not be understood to imply a trust ordinarily understood at common law.

security is an absolute and exclusive right.

Can security interests be created over cryptoassets under Indonesian law?

In principle, there does not appear to be any barrier to the creation of a pledge or *fiducia* security over cryptoassets. However, open questions remain and matters concerning practical enforcement, such as whether a secured creditor can have direct access to the debtor's cryptoasset wallet, will arise.

As mentioned above, it seems likely that cryptoassets may qualify as moveable assets by deeming under the ICC. Creating a pledge over a cryptoasset would thus be similar to creating a pledge over scripless shares or securities. For a pledge over intangible property, such as scripless shares or securities, to become effective, the party against whom the pledge is to be enforced must be notified.

How the formality requirements applicable to shares can be best replicated in the case of any given cryptoasset remains unclear. The types of shares that are the most analogous to cryptoassets are (i) registered shares and (ii) dematerialised shares (i.e., certificated shares with an electronic "certificate"). For registered shares, a pledge is effectuated on notification of the pledge to the company in which the shares are held and the recording of the pledge in that company's shareholders' register. For dematerialised shares kept in the custody of the Indonesian Central Securities Depository (*Kustodian Sentral Efek Indonesia* or **KSEI**), a pledge is effectuated on notification of the pledge to the KSEI which will issue a confirmation letter certifying that the shares have been blocked and pledged. The question remains, however, whether a distributed ledger is functionally equivalent to a company's shareholders' register or the KSEI. Moreover, questions remain as to whether such register or the administrator of a distributed ledger can be easily identified in the case of cryptoassets.

Likewise, *fiducia* security over intangible assets would seem in principle applicable to cryptoassets. However, information on its use (or otherwise) over cryptoassets on the market is not available.

Japan*

What is property under the law?

Enacted in 1896, the Civil Code of Japan (*minpou*)⁷⁹ is modelled largely on the 1890 German civil code. Property law is dealt with in Part II of the Civil Code which is entitled “real rights” (*bukken*). In summary, Japanese law defines the concepts of “real rights” and “property law” by referencing the concept of “thing” (*mono*): property law is the “law of things”. It adopts a strict version of the *numerus clausus* principle, stipulating that “no real rights can be established other than those prescribed by laws, including this Code.”⁸⁰

Things are defined restrictively as *tangible* things.⁸¹ They include immovables (*fudosan*) and movables (*dosan*).⁸² Under the prevailing interpretation, for an object to be regarded as a “thing” in this technical sense, it must have the characteristics of (i) exclusive control and (ii) independence. Therefore, at present, land on a planet other than the Earth cannot be property due to the lack of exclusive control, while a screw in a watch cannot be property due to the lack of independence. Rights in “non-things” are generally treated as obligational under Japanese law so that they are not enforceable against everyone, with a limited number of exceptions.

Are cryptoassets property under the Civil Code?

It naturally follows from the above that cryptoassets, being intangible, are not subsumed under the definition of “thing” under the Civil Code. This definition was adopted in the *Mt Gox* case where the Tokyo District Court rejected the argument that bitcoin was a “thing” that could be “owned” under Japanese law. As a result, the taxonomy of cryptoassets is generally discussed independently from the broader discussions of the taxonomy of “things” (or property) under the Civil Code.

This being the case, the next question to ask is what rights, if any, a person holding a bitcoin or any other type of cryptoassets can have under the prevailing Japanese law. This was the focus of another *Mt Gox* case⁸³ where the court characterised the right of a bitcoin holder as an *in personam* claim analogous to a monetary claim. The court’s reasoning appeared to be based on an analogy between bitcoin and money. The court went further to state that a claim against a bitcoin exchange was tantamount to a claim against the bitcoin protocol itself. Such characterisation has been labelled “staggering” by some commentators.⁸⁴

This characterisation of rights in cryptoassets does not appear to have wide support in Japanese literature or practice. In fact, cryptoasset holders have been granted enhanced protection in certain situations by statutory developments under the Payment Services Act (**PSA**).⁸⁵ In particular,

* We are grateful for the contribution by Hiroto Yoshimi (Assistant Professor, Graduate Schools for Law and Politics, the University of Tokyo) and Toshiyuki Yamamoto (Partner, Nishimura & Asahi (Gaikokuho Kyodo Jigyo)).

⁷⁹ Civil Code (Japan) (Act No. 89 of April 27, 1896). An unofficial English translation can be found on a website operated by the Ministry of Justice of Japan [↗](#).

⁸⁰ Civil Code (Japan) (Act No. 89 of April 27, 1896) Art 175.

⁸¹ Civil Code (Japan) (Act No. 89 of April 27, 1896) Art 85.

⁸² Civil Code (Japan) (Act No. 89 of April 27, 1896) Art 86.

⁸³ n° 2017(wa)10977 (Tokyo District Court, 31 January 2018).

⁸⁴ Low, Kelvin F.K. and Hara, Megumi, “Cryptoassets and Property” (8 May 2022) [↗](#).

⁸⁵ Cryptoassets (*ango shisan*) are defined in the Payment Services Act as “property value” limited to that which is recorded on an electronic device or any other object by electronic means, excluding the Japanese currency, foreign currencies and currency-denominated assets. This is the same approach

amendments in 2019 to the PSA now give a cryptoasset holder priority in Japanese insolvency proceedings. Without directly recognising the property characteristics of cryptoassets, this amendment means that anyone who enters into a contract with an exchange service provider with which it entrusts the management and custody of cryptoassets is entitled to have its claim for transfer of the cryptoassets satisfied ahead of other creditors out of the assets of that exchange service provider. This, in essence, provides the functional equivalent of “proprietary” protection when it perhaps matters the most. The effects of such statutory developments are currently being tested in the context of a Japanese registered subsidiary in relation to the bankruptcy of FTX.

Beyond such statutory developments, the approaches that Japanese law could take to provide ownership-like protection for cryptoassets may include amending the definition of “thing” in the Civil Code to include intangible objects, creating a parallel regime that treats (some or all) cryptoassets as “deemed things” for specific purposes,⁸⁶ recognising the existence of quasi-property rights, and dealing with the problems presented by cryptoassets through the device of a trust.

Possession

The Civil Code states that “[p]ossessory rights are acquired by possessing a thing with the intention to do so on one’s own behalf.”⁸⁷ Given that the definition of “thing” under the Civil Code includes only tangible objects, the concept of possession under Japanese law is the physical possession of a tangible object. The Civil Code allows for “quasi-possession” over rights (i.e., non-things), such as usufructs, claims and intellectual property rights. For example, where a person can factually control credit through his or her intentions, the person is in “quasi-possession” of the credit and payment to this person can be effective under some situations.⁸⁸

How does possession apply to cryptoassets?

In Japan, discussions of ownership, transfer, custody and security rights of cryptoassets generally do not rest on the concept of possession.

Under the Civil Code, it is not possible for a customer and a cryptocurrency exchange service provider to enter into a deposit agreement (*kitaku keiyaku*). This is because the Civil Code provides that the depositor must have ownership of the object deposited. As only “things” can be objects of the right of ownership, this effectively restricts the application of deposit agreements to tangible things.⁸⁹

On the other hand, the word “custody” or “custodian”, when used in a Japanese financial context, means a keeper or administrator of securities. From a regulatory perspective, the PSA requires a custodian of cryptoassets to be registered as a cryptoasset exchange service provider (**CAESP**). Trust companies and banks holding relevant licenses under other applicable statutes can provide custody

taken in the Financial Instruments and Exchange Act with respect to electronically recorded transferable rights.

⁸⁶ This is the approach taken by the German legislature to digital debt securities. The *Elektronische Wertpapiergesetz*, or the Electronic Securities Act, stipulates that electronic debt securities “count as” things in the sense of § 90 of the German civil code (the equivalent of Article 85 of the Civil Code of Japan) even though they are incorporeal. See “Germany: Electronic Securities Act Enters into Force”, Library of Congress, 29 June 2021 [🔗](#).

⁸⁷ Civil Code (Japan) (Act No. 89 of April 27, 1896) Art 180.

⁸⁸ Civil Code (Japan) (Act No. 89 of April 27, 1896) Art 478.

⁸⁹ Civil Code (Japan) (Act No. 89 of April 27, 1896) Art 657. See also n° 2014(wa)33320 (Tokyo District Court, 5 August 2015). An unofficial English translation of the judgment is available at [📄](#).

services for cryptoassets without registration under the PSA. Custody agreements have no statutory basis under the Civil Code. Therefore, unlike a deposit agreement, the object of a custody agreement is not limited to tangible things. A customer who wants a CAESP to transfer the cryptoassets under its custody to him or her must make a claim for transfer of the cryptoassets.⁹⁰ Some argue that a creditor can force the debtor to disclose its private key through civil procedure.⁹¹

In practice, if a creditor wants to seize or enforce against the cryptoassets of the debtor, the creditor will seize the cryptoasset transfer claim against the CAESP of the debtor rather than seizing the cryptoassets themselves. A judge who sat in a court for enforcement of judgements or decisions has stated that “it is becoming more common to seize or execute cryptoasset transfer claims that the debtor has against a CAESP.”⁹² The Tokyo District Court has now developed procedures and forms for seizing or enforcing cryptoasset transfer claims against CAESPs.⁹³

The 2019 amendments to the PSA also require a CAESP to segregate funds of customers from its proprietary assets and entrust customers’ funds to a trust company. The CAESP must ensure that cryptoassets are immediately identifiable as to which customer they belong to by using an appropriate method, such as a “cold wallet”.

Security interests

The Civil Code contains definitions of four security interests: (i) statutory lien (*sakidori-tokken*), (ii) lien (*ryuchi-ken*), (iii) pledge (*shichi*) and (iv) mortgage (*teitou-ken*). The objects of security interests are not limited to ownership. For example, claims and intellectual property rights can be the objects of a pledge.

In addition to the four security interests recognised under the Civil Code, other security arrangements are commonly used in practice, including preliminary registration securities (*karitokitanpo-ken*), assignment of security interests (*jototanpo-ken*), retention of title (*shoyuken ryuho*) and other transactions designed to create a security interest. Financial lease is also common on the Japanese financial market. Most of these security interests involve transferring ownership (in this case, control) of a collateral whereby the obligee acquires ownership of the object and pays for the difference of the value of ownership and the amount of obligation when enforcing such security interests. These “unrecognised” or “atypical” security arrangements are usually used by creditors who do not want to go through the costly and slow auction procedures of execution courts, and instead prefer simpler and quicker enforcement procedures.

Can security interests be created over cryptoassets under Japanese law?

At present, it seems difficult or impossible to create any of the four recognised security interests over cryptoassets under Japanese law. All the recognised security interests are regarded as security against rights rather than against the relevant value itself. It is unclear whether cryptoassets can be

⁹⁰ LEX/DB 25569518 (Tokyo High Court, 10 December 2020).

⁹¹ Tetsu Aoki, “Cryptoassets (Bitcoin) and Execution and Bankruptcy”, *Kinyuhomujijo*, No. 2119 at pp 18-25 (青木哲「暗号資産(ビットコイン)と強制執行・倒産」金融法務事情 2119 号 18 頁 (2019)) .

⁹² Mitsuhiro Hamada, “Execution related to Cryptoassets (Digital Currencies)”, *Kinyuhomujijo* No. 2146 at pp 42-54 (濱田光彦「暗号資産(仮想通貨)をめぐる強制執行」金融法務事情 2164 号 42 頁 (2021)) .

⁹³ Satomi Nakamura and Junko Kenmochi, “Practice of Civil Execution [5th Edition]: Execution against Claims and Investigation of Assets (Part 1)” at pp 280-297 (中村さとみ＝劔持淳子・編著『民事執行の実務【第5版】債権執行・財産調査編(下)』280-297 頁(きんざい、2022)) .

objects of these security interests because cryptoassets are neither rights nor claims.

It may be possible to give a lender factual control of a cryptoasset by using a certain type of security arrangement,⁹⁴ but whether that arrangement will be considered a valid security interest under the Civil Code is questionable. For example, Party A and Party B can enter into an agreement whereby Party A transfers bitcoins held in address X to address Y for the purpose of creating a security interest for the obligation that Party A owes Party B. However, once the transfer is completed, full title to the bitcoins is passed to Party B and Party A owns nothing. If subsequently Party A fulfils its obligations and wants the security interest over the bitcoins released, it only has a claim against Party B for transfer of the same amount of bitcoins back to Party A. If Party B has already transferred the bitcoins to a third party, Party A cannot recover those bitcoins from that third party.⁹⁵

As of now, there is no legislative guidance regarding the above scenario. The provisions on security interests under the Civil Code are being amended. If the amendments are enacted, the Civil Code is expected to have provisions on “unrecognised” security interests mentioned above, such as retention of title. However, those amendments are unlikely to directly address questions about security rights over cryptoassets.

⁹⁴ In practice, a combination of depositing cryptoassets and set-off is employed as a security arrangement for cryptoassets. The debtor transfers its cryptoassets to the creditor (security interest holder) as security, and the creditor sets off its obligation to return the cryptoassets to the debtor against its claim. See, Akihiro Shiba, “Legal Matters of Transfer of Cryptoassets and Other Dealings and Legal Practices” *kinyushojihanrei* No. 1611 at pp 83-88 (芝章浩「暗号資産の移転その他の処分 of 法律関係と実務」金融商事判例 1611 号 83 頁(2021)) .

⁹⁵ Hiroto Dogauchi, “Legal Nature of Digital Currency: Eligibility as Subject of Security Interest” in Hiroto Dogauchi, Naoya Katayama, Nariaki Yamaguchi, and Noriyui Aoki, *Development of Society and Civil Law Studies (First Part)*, (Tokyo: Seibundo, 2019) at pp 489-501 (道垣内弘人「仮想通貨の法的性質-担保物として適格性-」道垣内弘人=片山直也=山口齐昭=青木則幸編『社会の発展と民法学(上)』(成文堂、2019) 489-501 頁) .

Thailand*

What is property under the law?

Thailand adopts the civil law legal system resembling various European code-based legal systems, but has also been influenced by various common law precedents. In terms of property law, the most relevant provisions can be found in the Thai Civil and Commercial Code (**Thai CCC**) which reflects, more or less closely, the model set out in the French civil code.

Under the Thai CCC, “things” (*sap* or ทรัพย์สิน) are physical objects⁹⁶ while “property” (*sap-sin* or ทรัพย์สินสิน) includes things as well as incorporeal objects that are susceptible of having value and being appropriated.⁹⁷ On this basis, property covers both things and incorporeal objects which have economic value and can be appropriated, such as shares, rights, intellectual property, etc.

Thai law draws a basic distinction between moveable and immoveable property. Movable property denotes things other than immovable property and includes “rights connected therewith”.⁹⁸

Section 1336 of the Thai CCC provides that subject to the law, an owner of property has the right to use, dispose of, and acquire the fruits of, the property. Further, the owner has the right to follow and recover the property from any person not entitled to possess the property, and to prevent unlawful interference with the property. There is no provision that *prima facie* restricts the application of section 1336 to only “things”, and it is clear that certain types of “property” can be objects of ownership.

Are cryptoassets property under the Thai CCC?

Based on the above, cryptoassets would presumably constitute “incorporeal objects” capable of having value and, through the exercise of “control” within a blockchain system, of being appropriated. Although cryptoassets cannot be “moved” in the physical sense, it is likely that a Thai court would treat cryptoassets as moveable property. This is because immoveable property is generally restricted to land and objects and rights attached to land.

From a regulatory perspective, the Emergency Decree on Digital Asset Businesses,⁹⁹ which defines two categories of “digital asset”, namely cryptocurrency and digital token, is the piece of Thai regulation that is the most specific to cryptoassets. However, the main purpose of that decree is to regulate matters such as the offering of digital tokens, conduct of digital asset business, prevention of unfair market practices, etc. instead of directly addressing the property status of digital assets. Nevertheless, it is worth noting that the decree requires a digital asset business operator to segregate “client property” from its own property, and specifies that “client property” kept in the account of a digital asset business operator belongs to the clients.¹⁰⁰ This may imply that the notion of ownership and property are recognised implicitly in the decree and adopted for digital assets

* We are grateful for the contribution by Pawee Jenweeranon (Lecturer in Law, Thammasat University Faculty of Law) and Nat Boonjunwetat (Partner, Thanathip & Partners).

⁹⁶ Civil and Commercial Code (ประมวลกฎหมายแพ่งและพาณิชย์), section 137. An unofficial English translation is available at [D](#).

⁹⁷ Civil and Commercial Code (ประมวลกฎหมายแพ่งและพาณิชย์), section 138.

⁹⁸ Civil and Commercial Code (ประมวลกฎหมายแพ่งและพาณิชย์), section 140.

⁹⁹ Emergency Decree on Digital Asset Businesses (B.E. 2561/C.E. 2018). An unofficial English translation is available at [D](#). Both cryptocurrencies and digital tokens are defined as some kind of “electronic data unit”.

¹⁰⁰ Emergency Decree on Digital Asset Businesses (B.E. 2561/C.E. 2018), section 31.

under Thai law.

Possession

The Thai CCC does not specifically define the term “possession”, but does stipulate that a party acquires possessory rights “by holding a piece of property with the intention of holding it for himself”.¹⁰¹ In this context, possession is interpreted broadly and is not limited to physical possession. The Supreme Court of Thailand has ruled that a person may acquire possessory rights in shares by holding such shares with the intention of holding them for himself.¹⁰² Thai law does not recognise the concept of “quasi-possession”.

How does possession apply to cryptoassets?

Based on the Supreme Court judgment, it is likely that the concept of possession will be extended to cryptoassets as “electronic data units” which are property having value and capable of being appropriated. Despite the lack of clear guidelines or court cases in this respect, it is undeniable that holding private keys is one of the key factors in determining possession of cryptoassets.

Possession has numerous practical consequences. Although the right of possession is different from ownership and a person may transfer possession of a piece of property without transferring ownership, the concept of possession is likely to hold importance in cases such as the sale of unidentified or unspecified cryptoassets where completion of a transfer would be conditioned on the successful “delivery” of those cryptoassets. Possession is also likely to be important in custodial arrangements, particularly for determining a clear segregation of cryptoassets under custody and who has custody over and bears responsibility for cryptoassets at a given time.

Possession is also relevant to the creation of security interests in cryptoassets, as explained below.

Security interests

Thai law recognises four main types of security interests: (i) mortgage, (ii) pledge, (iii) business security interest and (iv) security interest over scripless securities. Mortgage and pledge are governed by the Thai CCC. Business security interest is regulated under the Business Security Act.¹⁰³ Security interest over scripless securities falls under the Securities and Exchange Act.¹⁰⁴

Mortgage

Mortgage is restricted to immoveable property and certain types of moveable property. Movable property capable of being mortgaged must be registered pursuant to the law, which restricts such property to (i) vessels weighing not less than five tons, (ii) a floating house, (iii) a beast of burden and (iv) any other movable property specified by law (such as plant and machinery).¹⁰⁵

¹⁰¹ Civil and Commercial Code (ประมวลกฎหมายแพ่งและพาณิชย์), section 1367.

¹⁰² Supreme Court of Thailand judgment No. 3395/2529. This case concerns a transfer of disputed shares which was not fully in compliance with all applicable statutory requirements. The Supreme Court held that a person who did not object to the transfer and subsequently held the shares with the intention of holding them for himself had acquired possessory rights in the shares. Further, as the person had possessed the shares for more than five years, the person was deemed to have acquired ownership in the shares and was therefore liable for the outstanding value of the shares.

¹⁰³ Business Security Act (B.E. 2558/C.E. 2016). An unofficial English translation is available at [D](#).

¹⁰⁴ Securities and Exchange Act (B.E. 2535/C.E. 1992). An unofficial English translation is available at [D](#).

¹⁰⁵ Civil and Commercial Code (ประมวลกฎหมายแพ่งและพาณิชย์), section 703.

Pledge

Pledge is restricted to property that can be physically delivered (*song-mob* or สงวน) to the pledgee, as it is delivery that perfects a pledge. Likewise, a pledge will be extinguished if the pledged property is returned to the possession of the pledgor.

Business security interest

Currently, business security interests can only be created on the following assets:

- businesses;
- claims;
- movable property used by the security provider in business operations, such as machinery, inventory or raw materials used in the manufacturing of goods;
- immovable property where the security provider operates directly in real estate business;
- Intellectual property; and
- other property prescribed under Ministerial Regulations (such as perennial plant).

Security interest over scripless shares

Security interest over scripless shares can only be created on securities listed on the Stock Exchange of Thailand (**SET**).¹⁰⁶

Can security interests be created over cryptoassets under Thai law?

Can any of the aforesaid security interests be created over cryptoassets under Thai law? The answer seems to err on the negative side. First, cryptoassets are not immovable property and are unlikely to be considered as falling under the types of moveable property capable of being mortgaged, making it impossible to create a mortgage over cryptoassets. Second, as what constitutes the delivery and possession of cryptoassets is unclear under Thai law at this stage, the creation of a pledge over cryptoassets remains questionable. For example, it is questionable whether a pledge can possibly be created on a cryptoasset by delivery of the private key or hardware wallet of the cryptoasset. Third, the list of assets on which business security interests can be created does not include cryptoassets or any description that is broad enough to cover cryptoassets. Finally, cryptoassets are not included in the definition of securities on which security interest over scripless shares can be created.

Thai law in its present form does not contain any express provision on the creation of security interests over cryptoassets. Accordingly, while the taking of security over cryptoassets is not subject to any express prohibition, the implications of doing so, such as the form of such a security, its perfection and enforcement, etc., remain unclear. In other words, although arrangements can be made on a contractual basis to take security over cryptoassets, such arrangements may not be enforceable, and are unlikely to protect third parties who might otherwise have a proprietary security right in the cryptoassets used as collaterals under such arrangements.

In light of the above, reform involving bespoke legislation or clear guidance from relevant authorities on the taking of security over cryptoassets is likely needed in order to provide clarity on relevant issues. At present, the Thai central bank does not encourage commercial banks under its purview to

¹⁰⁶ Securities and Exchange Act (B.E. 2535/C.E. 1992), section 228/1.

disburse loans to individual customers for the purpose of investing in digital assets or to use digital assets as collaterals, so as to manage highly risky investment loans which may affect debtors' credit ratings and household debt.¹⁰⁷ Likewise, the SET does not fully support deposit taking and lending transactions involving digital assets.

¹⁰⁷ Notification of the Bank of Thailand No. FPG. 6/2565 Re: Regulations on commercial banks' financial business groups undertaking digital asset related to businesses and transactions (6 October 2022). An unofficial English translation is available at [D](#).

Vietnam*

What is property under the law?

Vietnam's legal system is influenced by eastern and western legal traditions, the French civil law system and Soviet legal ideology. The concept of "property" first appeared in Vietnamese legal instruments between 1858 and 1945, a period when the law was deeply influenced by the French legal system. Following Vietnam's independence, numerous legal documents were promulgated which adjusted and reformed the notion of property set out in older instruments. Those adjustments ultimately gave birth to the Civil Code of Vietnam of 1995 and its subsequent amendments.

The current Vietnamese civil code, Civil Code of 2015, has moved the provisions on property into Part One ("General Provisions") instead of Part Two which deals with civil rights (as was the case in the 2005 edition). This may reflect the fact that property is the subject matter of not only ownership rights but also other legal institutions such as contract and succession.¹⁰⁸ Under the Civil Code, property comprises four categories: objects, money, valuable papers and property rights.¹⁰⁹ It is divided into two mutually exclusive and exhaustive categories: immovable property which is defined by a list comprising land, houses and structures attached to land, other property attached to land, houses and structures, and other property as provided by law; and moveable property which is defined as all property that is not immovable.¹¹⁰

The owner of a piece of property enjoys three basic rights, namely the right of possession of the property,¹¹¹ the right to use the property¹¹² and the right to dispose of the property,¹¹³ subject to applicable restrictions.

Are cryptoassets property under the Civil Code?

For a cryptoasset of any type to qualify as property under Vietnamese law, it must fit into one of the four categories outlined above. Otherwise, a cryptoasset will not attract any property right.

Cryptoassets are clearly not objects as understood under Vietnamese law. Objects are understood to mean tangible manifestations of the material world that have objective existence which people can perceive with their senses.

Despite their popular nomenclature as "cryptocurrency", there are also serious questions about whether any given cryptoasset (or indeed any cryptoasset at all) satisfies the definition of money under the law. Bitcoins and other cryptocurrencies cannot be considered as the official currency of Vietnam and are not considered as foreign currencies or objects of foreign exchange.¹¹⁴ The central bank of Vietnam announced in 2017 that cryptocurrencies are not legal tender and are not lawful means of payment, and that the issuance, supply and use of cryptocurrencies in general (and bitcoin

* We are grateful for the contribution by Pham Duy Khuong (Founder and Managing Director, ASL Law).

¹⁰⁸ Nguyen Xuan Quang and Tran Ngoc Tuan, "Vietnam's new regulations on ownership" (Vietnam Law & Legal Form, Vietnam News Agency, 12 December 2016) [↗](#).

¹⁰⁹ Civil Code 2015 (No. 91/2015/QH13) Art 105. An unofficial English translation is available at [D](#).

¹¹⁰ Civil Code 2015 (No. 91/2015/QH13) Art 107.

¹¹¹ Civil Code 2015 (No. 91/2015/QH13) Art 186.

¹¹² Civil Code 2015 (No. 91/2015/QH13) Art 189.

¹¹³ Civil Code 2015 (No. 91/2015/QH13) Art 192.

¹¹⁴ Law on the State Bank of Vietnam (No. 46/2010/QH12) Art 6. An unofficial English translation is available at [↗](#).

in particular) as a means of payment is prohibited.¹¹⁵

Valuable papers are popular assets in exchange today, especially for transactions involving banks and other credit institutions. They are papers that are valued in monetary terms and are transferrable on civil exchanges. Cryptoassets cannot be considered valuable papers because the Supreme People's Court of Vietnam has stated that valuable papers only include government bonds, corporate bonds, promissory notes, stocks, bills of exchange, cheques and other negotiable instruments.¹¹⁶

This process of elimination brings one to the fourth, catch-all category of property called “property rights” which are defined as “rights valued in monetary terms, including property rights over intellectual property rights, land use rights and other property rights”.¹¹⁷ This category may include rights in objects or rights against persons to do or forbear from doing something. While it might be possible for some cryptoassets to fit into this category, how they do so is unclear and will likely depend on a case-by-case analysis of the cryptoasset in question — in particular, how it is designed, what it is used for, whether it is linked to some “real world” reference asset, etc.

Therefore, according to the current understanding of Vietnamese law, it appears that most cryptoassets are not likely to qualify as property as they do not fit into any of these four categories.

Cryptoasset transactions are not specifically regulated under Vietnamese law. Hence, Vietnamese parties engaging in those transactions on international exchanges are not protected by law. The Vietnamese government is studying and evaluating the need to promulgate regulations to regulate cryptoassets.

Possession

Vietnamese law characterises possession as a legal state of affairs rather than a mere factual circumstance. Possession means “the direct or indirect holding or control of property by a subject as the subject having rights in respect of the property”.¹¹⁸ In principle, possession must have a positive imprint of the true owner to be recognised and protected by law. This is different from mere factual possession, which is simply holding and controlling property but not having the will to consider it as one's own.

How does possession apply to cryptoassets?

As cryptoassets have not been recognised as a form of property according to Vietnamese law, how the concept of possession will apply to them under Vietnamese law is unclear. Using intellectual property, another class of intangible assets, as an analogy. Intellectual property itself cannot be “held” or “controlled” in the conventional sense. However, documents proving ownership of intellectual property can be held and controlled. For assets whose ownership is grounded in registration rather than possession, a *public* register is generally required.

Security interests

The list of security interests available under Vietnamese law is long, and comprises pledge, mortgage, performance bond, security deposit, escrow deposit, retention of ownership, guarantee, fidelity guarantee, and retention of property.¹¹⁹ All of these security interests presuppose an object

¹¹⁵ Official Letter No. 5747/NHNN-PC of 21 July 2017 of the State Bank of Vietnam.

¹¹⁶ Official Letter 141/TANDTC-KHXX of 21 September 2011 of the Supreme People's Court of Vietnam.

¹¹⁷ Civil Code 2015 (No. 91/2015/QH13) Art 115.

¹¹⁸ Civil Code 2015 (No. 91/2015/QH13) Art 179.

¹¹⁹ Civil Code 2015 (No. 91/2015/QH13) Art 292.

of property rights.

Can security interests be created over cryptoassets under Vietnamese law?

As cryptoassets have not been recognised as a form of property, it is likely that none of these security interests can be created over cryptoassets under Vietnamese law. Take pledge as an example. A pledge involves the delivery of the underlying property to the pledgee pursuant to an agreement and the return of the property on demand once the relevant obligation is fulfilled or the realisation of the pledge by the pledgee if the obligation is breached.¹²⁰ It is difficult to see at present how either of these elements would be fulfilled in the case of cryptoassets.

¹²⁰ Civil Code 2015 (No. 91/2015/QH13) Art 310.

REFERENCES

References

Cases

Japan

- n° 2014(wa)33320 (Tokyo District Court, 5 August 2015).
- n° 2017(wa)10977 (Tokyo District Court, 31 January 2018).
- LEX/DB 25569518 (Tokyo High Court, 10 December 2020).

Thailand

- Supreme Court of Thailand judgment No. 3395/2529.

Statutes

- Bürgerliches Gesetzbuch (Germany).
- Business Security Act (B.E. 2558/C.E. 2016) (Thailand).
- Civil and Commercial Code (Thailand).
- Civil Code (Act No. 89 of April 27, 1896) (Japan).
- Civil Code of the People's Republic of China (China).
- Civil Code 2015 (No. 91/2015/QH13) (Vietnam).
- Code Napoléon (France).
- Financial Instruments and Exchange Act (Act No. 25 of April 13, 1948) (Japan).
- Indonesian Civil Code (promulgated by publication of April 39 1847 S.NO. 23) (Indonesia).
- Law No. 32 of 1997 on Commodity Future Trading (amended by Law No. 11 of 2011 and Law No. 4 of 2023 on Financial Sector Development and Reinforcement) (Indonesia).
- Law No. 7 of 2011 on Currency as lastly amended by Law No. 1 of 2023 on Criminal Code (Indonesia).
- Law No. 7 of 2014 on Trade (as amended) (Indonesia).
- Law on the State Bank of Vietnam (No. 46/2010/QH12) (Vietnam).
- Payment Services Act (Act No. 59 of June 24, 2009) (Japan).
- Securities and Exchange Act (B.E. 2535/C.E. 1992) (Thailand).
- UNCITRAL Model Law on Transferable Electronic Records [↗](#).

Judicial interpretations

- Interpretations (1) of the Supreme People's Court on the Application of the Book on Property Rights of the Civil Code of the People's Republic of China.
- Interpretations of the Supreme People's Court on the Application of the Relevant Guarantee System of the Civil Code of the People's Republic of China.
- Official Letter 141/TANDTC-KHXX of 21 September 2011 of the Supreme People's Court of Vietnam.

Regulatory guidance

- Announcement of the People's Bank of China, the Office of the Central Leading Group for Cyberspace Affairs, the Ministry of Industry and Information Technology and Other Departments on Preventing the Financing Risks of Initial Coin Offerings (4 September 2017).
- Bank Indonesia Regulation No. 17/3/PBI/2015 on Obligation to Use Rupiah in Indonesia.
- Bank Indonesia Regulation No. 23/6/PBI/2021 on Payment System Service Providers.
- Eleven Model Cases for Adequately Performing Procuratorial Functions in Furtherance of Cyberspace Governance of the Supreme People's Procuratorate of the People's Republic of China (25 January 2021).
- Emergency Decree on Digital Asset Businesses (B.E. 2561/C.E. 2018).
- MoF Regulation No.68/PMK.03/2022 (PMK-68) of the Ministry of Finance of Indonesia.
- Notice of the People's Bank of China, the Cyberspace Administration of China, the Supreme People's Court, the Supreme People's Procuratorate, the Ministry of Industry and Information Technology, the Ministry of Public Security, the State Administration for Market Regulation, the China Banking and Insurance Regulatory Commission, the China Securities Regulatory Commission and the State Administration of Foreign Exchange on Further Preventing and Resolving Risks of Virtual Currency Trading and Speculation (Yin Fa 2021 No. 237).
- Notice of the People's Bank of China, the Ministry of Industry and Information Technology, the China Banking Regulatory Commission, the China Securities Regulatory Commission and the China Insurance Regulatory Commission on Preventing Bitcoin Risks (Yin Fa 289 [2013]).
- Notification of the Bank of Thailand No. FPG. 6/2565 Re: Regulations on commercial banks' financial business groups undertaking digital asset related to businesses and transactions.
- Official Letter No. 5747/NHNN-PC of 21 July 2017 of the State Bank of Vietnam.
- Regulation No. 8 of 2021 on Guidelines for the Implementation of Crypto Asset Physical Market Trading in the Futures Exchange.
- Risk Warning of the People's Bank of China on Issuing or Promoting Digital Currencies by Fraudulently Using the Name of the People's Bank of China (15 June 2017).

White paper

- UK Jurisdiction Taskforce, “Legal statement on cryptoassets and smart contracts”, November 2019 [D](#).

Secondary sources

Books

- Jason Allen, *Cryptoassets and property law: Singapore edition* (Asian Business Law Institute and Singapore Academy of Law, November 2022) [D](#).
- Jason Allen, *Cryptoassets and property law: Common law edition* (Asian Business Law Institute and Singapore Academy of Law, April 2023) [D](#).
- Christian von Bar (J.G. Allen trans.), *Foundations of Property Law: Things as Objects of Property Rights* (Oxford University Press, August 2023).
- Satomi Nakamura and Junko Kenmochi, “Practice of Civil Execution [5th Edition]: Execution against Claims and Investigation of Assets (Part 1)”.
- Hiroshi Oda, *Japanese Property Law* (3rd Edition, Oxford University Press 2009).

Journal articles

- J.G. Allen, “Cryptoassets in Private Law” in Iris Chiu and Gudula Deipenbrock (eds.), *Routledge Handbook of Fintech Law and Regulation* (Routledge 2021), Ch 17.
- Tetsu Aoki, “Cryptoassets (Bitcoin) and Execution and Bankruptcy”, *Kinyuhomujijo*, No. 2119.
- Hiroto Dogauchi, “Legal Nature of Digital Currency: Eligibility as Subject of Security Interest” in Hiroto Dogauchi, Naoya Katayama, Nariaki Yamaguchi, and Noriyui Aoki, *Development of Society and Civil Law Studies (First Part)*, (Tokyo: Seibundo, 2019).
- Mitsuhiro Hamada, “Execution related to Cryptoassets (Digital Currencies)”, *Kinyuhomujijo* No. 2146.
- Chen Huabin, “A Study on Possession Rule in Property Volume of China’s Civil Code Legislation”, *Modern Law*, 2018, 40(01).
- Feng Jieyu, “On the Normative System of Digital Currency in Private Law”, *Journal of Politics and Law*, 2021(7).
- Guiliano Castellano, “Towards a General Framework for a Common Definition of ‘Securities’: Financial Markets Regulation in Multilingual Contexts” (2012) 17(3) *Uniform Law Review* 449 [D](#).
- Michele Graziadei, “The Structure of Property Ownership and the Common Law/Civil Law Divide” in Michele Graziadei and Lionel Smith (eds.), *Comparative Property Law — Global Perspectives* (Edward Elgar 2017).

- Ji Hailong, “The Consensual Approach to Extending Security Interests in Personal Property Proceeds”, *Modern Law*, 222, 44(03).
- Lin Shengchao and Lin Haizhen, “Criminal Law Regulation of Illegal Transfer of Cryptocurrency”, *The Chinese Prosecutors*, 2021(18).
- Akihiro Shiba, “Legal Matters of Transfer of Cryptoassets and Other Dealings and Legal Practices” *kinyushojihanrei* No. 1611.
- Kelvin Low and Megumi Hara, “Cryptoassets and Property” (8 May 2022) [↗](http://dx.doi.org/10.2139/ssrn.4103870) (DOI: <http://dx.doi.org/10.2139/ssrn.4103870>).
- Ben McFarlane and Simon Douglas, “Property, Analogy and Variety”, (2022) 42(1) *Oxford Journal of Legal Studies* 161.
- Mei Xiaying and Xu Ke, “On the Theoretical and Legislative Issues of Inheritance of Virtual Property”, *Jurists*, 2013 (06).
- Gerrit Meijer, “Influence of the Code Civil in the Netherlands”, *European Journal of Law and Economics*, 14 227–236 (2002) [↗](#).
- Tetsuo Morishita, “FinTech-jidai no kinyūhou no arikata ni kansuru jyosetuteki-kentou” in Etsuro Kuronuma and Tomotaka Fujita (eds), *Kigyohou no shinro (Path of Corporate Law)* (Tokyo: Yūhikaku, 2017).
- Hiroki Morita, “Kasou Tsūka no Shihoujyō no seishitsu nitsuite”, 2095 *Kinyūhoumujijyō* 14.
- Sabrina Praduroux, “Objects of Property Rights: Old and New” in Michele Graziadei and Lionel Smith (eds.), *Comparative Property Law — Global Perspectives* (Edward Elgar 2017).
- Xie Hongfei, “Guarantee Capacity of Property: Limitations and Expansions”, *Journal of Social Sciences*.
- Yang Lixin: “The Real Right of Civil Law should Stipulate the Principle of Numerus Clausus Relaxation”, *Tsinghua Law School*, No. 2, 2017.
- Jing Zhang, “Recent Developments in the Law of Secured Transactions of Movable under the New Chinese Civil Code” (2021) 26(1) *Uniform Law Review* 191.
- Zhang Zhipo, “Possibility and Its Boundary of Numerus Clausus Relaxation”, *Comparative Law Research*, No. 1, 2017.

Other materials

- Paul Babie, David Brown, Mark Giancaspro, and Ryan Catterwell, “Cryptocurrency and the Property Question” (Oxford Property Law Blog, 12 May 2020) [↗](#).
- Hanim Hamzah, Agnesya M. Narang and Anggi Yusari, “Legal Systems in Indonesia: Overview” (1 April 2021) [↗](#).
- Nguyen Xuan Quang and Tran Ngoc Tuan, “Vietnam’s new regulations on ownership” (Vietnam Law & Legal Form, Vietnam News Agency, 12 December 2016) [↗](#).

- Germany: Electronic Securities Act Enters into Force”, Library of Congress, 29 June 2021 [↗](#).
- Basel Committee on Banking Supervision, “Prudential treatment of cryptoasset exposures”, June 2021 [D](#).
- European Banking Authority, EBA reports on crypto-assets, 9 January 2019 [↗](#).
- European Central Bank, Crypto-assets — trends and implications, June 2019 [↗](#).
- Financial and Consumer Services Commission, Crypto assets and Cryptocurrency [↗](#).
- Financial Stability Board, Crypto-assets and Global Stablecoins [↗](#).
- International Institute for the Unification of Private Law, *Principles on Digital Assets and Private Law*, May 2023 [D](#).
- Law Commission of England and Wales, Digital Assets Final report (Law Com No 412) (28 June 2023) [↗](#).

