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Co-ownership as a Solution to Commingling: A Finnish Perspective

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Abstract: This article studies the effect of commingling on ownership relations, and in particular co-ownership as a solution to these situations. The focus is first on tangible movables, but broadens to objects such as bank money, book entries, and virtual currencies. These intangible objects are account-based assets, or can be understood as such. The first part of the analysis takes place at the level of general legal ideas, while the second part examines Finnish law in more detail. Both parts involve comparative observations. The analysis suggests that co-ownership is generally a rationally justifiable solution and should therefore be widely applicable. However, its relative merits depend on the broader legal context, and thus vary between legal systems. The scope of co-ownership as a solution to commingling is currently unclear under Finnish law. Especially as regards account-based assets, the case law of the Finnish Supreme Court excludes this solution in certain situations where its adoption would otherwise be advisable.

Résumé: Cet article étudie l'effet du mélange de fonds sur les rapports de propriété et s'intéresse en particulier à la copropriété en tant que solution à ces situations. L'attention se porte tout d'abord sur les biens meubles corporels, mais s'élargit à des objets tels que l'argent des banques, les inscriptions comptables et les monnaies virtuelles. Ces biens incorporels sont des actifs basés sur des comptes ou peuvent être considérés comme tels. La première partie de l'analyse se situe au niveau de notions juridiques générales alors que la seconde partie examine plus en détail le droit finlandais. Les deux parties comprennent des observations comparatives. L'analyse indique que la copropriété est généralement une solution rationnellement justifiable et devrait ainsi s'appliquer largement. Cependant, ses mérites relatifs dépendent du contexte juridique plus large et par là, varient en fonction des systèmes juridiques. Le champ d'application de la copropriété en tant que solution au mélange de fonds est actuellement incertain en droit finlandais. Spécialement en ce qui concerne les actifs basés sur des comptes, la jurisprudence de la Cour suprême finlandaise exclut cette solution dans certaines situations, là où son adoption serait par ailleurs souhaitable.

Zusammenfassung: Der vorliegende Beitrag untersucht die Auswirkungen von Vermischung auf die Eigentumsverhältnisse und eruiert insbesondere das Miteigentum als Lösung für diese Situationen. Der Schwerpunkt der Untersuchung liegt zunächst auf materiellen beweglichen Gütern, wird aber auf Objekte wie Bankgeld, Bucheinträge und virtuelle Währungen ausgeweitet. Diese immateriellen Gegenstände sind kontobasierte Vermögenswerte oder können als solche verstanden

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werden. Der erste Teil der Analyse findet auf der Ebene allgemeiner Rechtsvorstellungen statt, während im zweiten Teil das finnische Recht genauer untersucht wird. In beiden Teilen werden vergleichende Betrachtungen angestellt. Die Analyse legt nahe, dass die Miteigentümerschaft im Allgemeinen eine rational vertretbare Lösung darstellt und daher weithin anwendbar sein sollte. Ihre relativen Vorzüge hängen jedoch vom breiteren rechtlichen Kontext ab und sind daher von Rechtsordnung zu Rechtsordnung unterschiedlich. Der Anwendungsbereich der Miteigentümerschaft als Lösung für die Vermischung ist nach finnischem Recht derzeit unklar. Insbesondere bei kontogebundenen Vermögenswerten schließt die Rechtsprechung des finnischen Obersten Gerichtshofs diese Lösung in bestimmten Situationen aus, in denen ihre Anwendung ansonsten ratsam wäre.

Resumen: Este artículo estudia el efecto de la mezcla (o conmixtión y confusión) en las relaciones de propiedad, y en particular la copropiedad como solución a estas situaciones. La atención se centra primero en los bienes muebles tangibles, pero se amplía a objetos tales como el dinero, las anotaciones en cuenta y las monedas virtuales. Estos objetos intangibles son activos contables o pueden entenderse como tales. La primera parte del análisis se desarrolla en el ámbito de las ideas jurídicas generales, mientras que la segunda examina el derecho finlandés con más detalle. Ambas partes incluyen referencias de derecho comparado. El análisis sugiere que la copropiedad es generalmente una solución racionalmente justificable y, por lo tanto, debería ser ampliamente aplicable. Sin embargo, sus ventajas relativas dependen del contexto legal más amplio y, por lo tanto, varían entre sistemas jurídicos. En la legislación finlandesa no está claro en la actualidad cuál es el alcance de la copropiedad como solución a la mezcla. Especialmente, en lo que respecta a los activos contables, la jurisprudencia del Tribunal Supremo finlandés excluye esta solución en determinadas situaciones en las que, de otro modo, sería aconsejable su adopción.

1. Introduction

1. The institution of co-ownership is ubiquitous in contemporary legal systems. The notion that person A may own a painting, a car, or real estate together with person B is generally uncontroversial. On a closer look, though, many differences appear. In particular, the nature of co-owners' entitlements and the extent of their powers vary between legal systems. Typically, legal systems recognize two or more kinds of co-ownership for different purposes.[1]

2. An object may become co-owned in several ways. For example, the sole owner of a painting may transfer ownership of the painting to two or more persons. However, it is possible that one and the same set of facts and actions results in co-ownership in one legal system, but not in another. This may be the case in

1 See C. VON BAR & E. CLIVE (eds), *Principles, Definitions and Model Rules of European Private Law. Draft Common Frame of Reference (DCFR)*, Volume 5 (Oxford: Oxford University Press, full edn 2010), pp 4265–4288.

commingling of objects owned by different persons, where it becomes impossible or unreasonably costly to separate the original objects.[2]

3. In this article, we study co-ownership as a solution to commingling. Our first aim is to establish theoretical starting points for further analysis. This requires discussion of the nature of commingling and its possible outcomes in terms of ownership relations. We start from tangible movables, but also consider objects such as bank money, book entries, and virtual currencies. Our second aim – and the overall purpose of the article – is to outline a rationally justifiable scope for what we call the 'co-ownership rule'. We define this rule as follows: the persons who owned the original objects become co-owners of the new object or objects created as a result of commingling, so that each person gets a share equivalent to the proportionate value of their original ownership in the commingled whole.

4. In studying the applicability of the co-ownership rule, we presume the absence of any relevant agreement between the persons involved or an equivalent unilateral disposition. Accordingly, our focus is on default rules that address commingling, whether statutory or judge-made. In a classic example, an object belonging to person A is accidentally commingled with an object belonging to person B. The objects could be containers of oil, whose contents are mixed together without the owners' consent. We further presume that while it is either impossible or unreasonably costly to separate the original objects, it is both possible and economically reasonable to divide the whole that results from their commingling. For example, a quantity of oil can normally be divided into two parts without significant loss of value.

5. Both of our aims should be meaningful in the context of all legal systems that recognize co-ownership and start with the premise that to own something requires a specific object. The first part of the analysis takes place at the level of general legal ideas (ss 2 to 3). The second part of the analysis looks into Finnish law in more detail (s. 4). Both parts involve comparative observations. Insofar as general or comparative observations give reason to question current Finnish solutions, we are ready to consider alternatives.

6. We mainly address objects that are classified as 'fungible' in many legal systems, but our discussion is not limited to objects of that kind. Therefore, a precise definition of fungibility is unnecessary.[3]

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2 See L. VAN VLIET, 'Creation', in S. van Erp & B. Akkermans (eds), *Cases, Materials and Text on Property Law* (Oxford: Hart Publishing 2012), Ch. 7, pp (617) at 671–679.

3 For example, s. 91 of the German Civil Code defines 'fungible things' (*vertretbare Sachen*) as 'movable things that in business dealings are customarily specified by number, measure or weight'. English translation of the German Civil Code, www.gesetze-im-internet.de/englisch_bgb/index.html.

2. Theoretical Starting Points

7. When lawyers talk about objects of ownership, they usually start from a similar understanding to anyone else's. We own paintings, cars, real estate, and so on. Conceptualization becomes more complicated when we consider a batch or a bulk, such as a large amount of grain, apples, or identical footballs in a container. Still, rather than owning a batch or a bulk as a whole, we could be thought to own each constitutive part of the batch or the bulk, such as each seed of grain, each apple, or each football. This seems even more plausible in the case of objects such as sheep in a herd.[4]

8. A conceptualization issue arises mainly in connection with batches or bulks consisting of individual objects that could reasonably be understood as objects of ownership. Not all objects are like that. For example, a quantity of oil in a container is one object because it would not be reasonable to claim – from the perspective of property law – that the oil consists of myriads of individual objects, finally down to molecules and atoms. Consequently, the commingling of two quantities of oil results in only one object. The applicable law determines who owns that object, but it would be out of the question to suggest that the owners of the original quantities still own the same (identifiable) quantities. This is because the original quantities have ceased to exist as meaningful objects of ownership. Our premise here is that ownership requires a specific object.

9. Other objects are clearly capable of being owned separately, even if they are identical and form a batch or a bulk. Footballs may serve as an example. It should be noted that this conceptualization does not exclude treating them as a batch or a bulk either, which may be necessary for practical purposes, such as trade. Indeed, it may be reasonable to consider the constituent parts as objects of ownership even when dealing with a batch or a bulk. The arguments for considering a batch or a bulk as an object of ownership become more compelling with objects such as grain or, say, berries or gravel. The plausibility of conceptualizations is affected – but not dictated – by how we are used to thinking of different objects as units in sales, consumption, and other uses.

10. From a practical point of view, it is important to acknowledge that banknotes and coins constituting legal tender in a country can also be mixed. As a starting point, it seems reasonable to consider specific banknotes and coins as objects that

4 While animals are generally regarded as potential objects of property rights, it would be highly problematic to equate them to inanimate objects. The German Civil Code can be cited again as an example. Under s. 90a of the German Civil Code, animals 'are not things' and 'are protected by special statutes', but the 'provisions that apply to things are to be applied accordingly to animals, unless otherwise provided'.

can be owned.[5] Whether it is justified to consider a mixture of cash as an object is another question.

11. Besides tangible objects, intangible entities are often considered as objects of ownership. For example, both lawyers and non-lawyers tend to speak of funds in a bank account. This involves, at least to some degree, equating bank money with cash, even though a positive bank account balance indicates the amount owed by the bank to the account holder. To be sure, analysis of the juridical structure of account relationships and opposition to legal fictions may provide arguments against this equation. Indeed, the so-called 'physical model' of dealing with account-based assets has been criticized in legal literature.[6] Arguably, to speak of commingling of bank money is conceptually incorrect in the light of the factual nature of bank money.[7] Nevertheless, many law drafters, judges and scholars around the world find it acceptable to do so and follow the physical model in dealing with such issues, probably due to its apparent practical usefulness.

12. In this article, we consider funds in a bank account as an object that can be owned.[8] As discussed in section 4, this conceptualization is common, at least in Finland. Moreover, we take a similar approach to other account-based assets. Examples include electronic book-entry securities, which have largely replaced paper security certificates in Finland. The Finnish book-entry system dates back to the early 1990s. Currently, the main pieces of legislation are the Act on the Book-Entry System and Settlement Activities (348/2017) and the Act on Book-Entry Accounts (827/1991). The concept of book entry in them encompasses all kinds of rights and securities incorporated into the book-entry system, such as shares. The Act on the Book-Entry System and Settlement Activities provides that book entries are not numbered (Chapter 4, s. 1). As a result, for example, 10 Nokia

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5 See M. Hinteregger & L. van Vliet, 'Transfer', in S. van Erp & B. Akkermans (eds), *Cases, Materials and Text on Property Law* (Oxford: Hart Publishing 2012), Ch. 8, p (783) at 784. Van Vliet writes: 'Ownership of money can exist, but only in relation to banknotes and coins. These are treated as movable, tangible, objects the ownership of which can be transferred in the property law sense of the word'. See also C. Stresemann, '§ 91 Vertretbare Sachen', in F.J. Säcker et al. (Hrsg.), *Münchener Kommentar zum Bürgerlichen Gesetzbuch*, Band 1 (München: C.H. Beck, 9th edn 2021), para. 3. In Germany, bank notes and coins are regarded as 'fungible things' within the meaning of s. 91 of the German Civil Code.

6 See K. Wallin-Norman, 'Kontoförd egendom – objekt eller vad?', *JT (Juridisk Tidskrift)* 2012–2013 (1), p 107.

7 See e.g., A. Waghorn, 'Sorting Out Mixtures of Property at Common Law', 84. *MLR (Modern Law Review)* 2021, p (61) at 82, doi: 10.1111/1468-2230.12572; K. Wallin-Norman, *JT* 2012–2013(1), pp (107) at 118–119.

8 Compare, C. Lebon, 'Property Rights in Respect of Claims', in S. van Erp & B. Akkermans (eds), *Cases, Materials and Text on Property Law* (Oxford: Hart Publishing 2012), Ch. 4, p (365) at 369. Lebon describes the question whether claims can be objects of ownership and other property rights as an 'area of intense debate' among academics.

shares in a book-entry account are indistinguishable from each other. For the purposes of this article, book entries in an account are objects that can be owned.

13. Looking at more recent developments, it appears that many virtual currencies are best understood as account-based assets. For example, bitcoin, the first and most widely known application of blockchain technology, basically involves a system of recorded transactions. From the property law perspective, bitcoins in an address cannot be separated from each other any more than can euros in a bank account.[9] In contrast, it is possible to create non-fungible tokens (NFTs), which cannot lose their individual nature and identifiability.[10]

14. The question how to conceptualize bitcoin and other virtual currencies from the property law perspective has become a matter of lively discussion internationally.[11] As a starting point, it seems reasonable to include them in the concept of property, unless the legal system in question excludes that conceptualization. Much of Finnish legislation must be interpreted in this way. For example, according to the Guardianship Services Act (442/1999), minors lack the capacity to make decisions about their property, unless otherwise provided by law (ss 2 and 23). It seems clear that virtual currencies are property within this meaning. The same is true for rules on property that can be attached (in enforcement of a payment obligation) and belong to a bankruptcy estate.[12]

15. Several questions follow if we start with the premise that fungible assets in an account can be owned. In the example of 10 Nokia shares in a Finnish book-entry account, we have to ask whether each individual share is an object of ownership. The alternative is that the total of those shares constitutes the object of ownership. Similarly, in the case of 100 euros in a bank account or 10 bitcoins in an address, the object could consist of the total of 100 euros or 10 bitcoins.

16. We have considered the different conceptualizations in this section with a view to providing theoretical starting points for discussion of ownership after

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9 See ECJ 22 Oct. 2015, ECLI:EU:C:2015:718, *Hedqvist*, curia.europa.eu/juris/documents.jsf?num=C-264/14. The Court notes that a bitcoin address 'may be compared to a bank account number' (para. 11).

10 R.M. Garcia-Teruel & H. Simón-Moreno, 'The Digital Tokenization of Property Rights: A Comparative Perspective', 41. *CLSR (Computer Law & Security Review)* 2021, 105543, p (1) at 2, doi: 10.1016/j.clsr.2021.105543.

11 See e.g., K.F.K. Low & E.G.S. Teo, 'Bitcoins and Other Cryptocurrencies as Property?', 9. *LIT (Law, Innovation and Technology)* 2017, p 235, doi: 10.1080/17579961.2017.1377915; M. Solinas, 'Investors' Rights in (Crypto) Custodial Holdings: Ruscoe v. Cryptopia Ltd (in Liquidation)', 84. *MLR (Modern Law Review)* 2021, pp (155) at 158–161, doi: 10.1111/1468-2230.12588; R.M. Garcia-Teruel & H. Simón-Moreno, 41. *CLSR* 2021, pp (1) at 4–5. See also UK Jurisdiction Taskforce, *Legal Statement on Cryptoassets and Smart Contracts* (Nov. 2019), https://technation.io/lawtechukpanel/.

12 Enforcement Code (705/2007), Ch. 4, s. 8; Bankruptcy Act (120/2004), Ch. 5.

commingling of tangible or intangible objects. We have deliberately avoided taking definitive stands because many of the questions may have more than one plausible answer. For our purposes, it is less important to follow a certain way of thinking than to acknowledge the existence of theoretical questions and to understand different theoretical commitments with which legal issues can be approached.

3. Co-ownership as a Rationally Justifiable Solution

3.1. The Argument of 'No Other Reasonable Solution' and Its Limits

17. It seems safe to say that the co-ownership rule, as defined in the introduction, is the only reasonable solution in some circumstances. Consider the following example. Person A owns 500 litres of oil, kept in a container. The container is in the immediate possession of person C, who also holds another container with 500 litres of identical oil owned by person B. Although C, an independent actor in relation to both A and B, is supposed to keep the two quantities of oil apart, a mistake occurs. C empties both containers into a third, initially empty container, which then contains 1000 litres of commingled oil.

18. The original ownerships of A and B are extinguished because the original objects of ownership have ceased to exist and have been replaced by a new object, that is, the 1000 litres of oil in C's possession. In this case, no other reasonable solution exists than that A and B own the new object together in equal shares, 1:1. No arguments could justify the view that either A or B alone owns the object, while it seems clear that C cannot have become the owner in the light of the facts described.

19. The exact content and effects of co-ownership vary between legal systems. Some rules may be specifically targeted at dealing with co-ownership resulting from commingling. Still, general rules on co-ownership in shares should apply to these situations as well. The relevant rules may consider the nature of the object. In particular, the ways to end co-ownership may vary between objects of different kinds. For example, the starting point set in section 752 of the German Civil Code is 'division in kind' (*Teilung in Natur*), where the co-ownership of an object is transformed into ownerships of objects separated from the initial object. In the case of a quantity of oil belonging to A and B, the easiest way to end the co-ownership is to divide the quantity into two quantities corresponding to the co-owners' shares of the initial quantity. Should this not be possible, other arrangements are needed. Under section 9 of the Finnish Co-ownership Act (180/1958), a court may order sale of the co-owned object if dividing the object is impossible or would be unreasonably costly or would considerably lower the value of the object. Similar rules exist in other legal systems, such as 'division by sale' (*Teilung durch Verkauf*) in section 753 of the German Civil Code.

20. After commingling, it is often possible to end co-ownership simply by dividing the object. If the law does not allow one co-owner alone to decide on division, then it must be done by mutual agreement between the co-owners. Where an agreement is necessary but one party has divided the object without the other party's consent, the new objects are co-owned by the same parties. In other words, co-ownership does not come to an end, but continues with respect to the new objects created by division.

21. Besides tangible objects, the co-ownership rule could be the only reasonable solution for objects such as bank money, book entries, and virtual currencies. Indeed, we may have to accept the existence of co-ownership based on commingling even with respect to account-based assets.

22. The argument of 'no other reasonable solution' has its limits, though. Certain factors, as such or in connection with other factors, may be invoked against co-ownership. We will next consider some of these factors, namely, (1) the continuing existence of original objects, (2) possession, and (3) differences in quantity or quality, and hence in value. Each of these factors can be traced to legislation, case law or legal literature, at least in some countries.

3.2. The Continuing Existence of Original Objects

23. When objects commingle, they may still retain their original nature, so that they can be owned separately. For example, objects such as footballs, even if identical, do not cease to exist because of commingling similarly to objects like quantities of oil. In that light, one could argue that the continuing existence of original objects prevents the co-ownership rule from applying. Commingling would not affect ownership since the objects would belong to their original owners. This would be the case even if it could in practice be very difficult or impossible to determine which object belongs to which person. In these situations, the 'continuing ownership rule' can be regarded as an alternative to the co-ownership rule.[13]

24. Lawyers have traditionally given relevance to the question whether objects mixed are still capable of being separated from each other. In Roman law, this was the basis for the distinction between *commixtio* and *confusio.* For example, if two herds of sheep became mixed together, the rules of *commixtio* applied because separation was possible. If separation was impossible, as in the case of commingled wine, the rules of *confusio* applied.[14]

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13 See e.g., A. Wachorn, 84. *MLR* 2021, p 61.

14 C. Anderson, *Roman Law Essentials* (Edinburgh: Edinburgh University Press, 2nd edn 2018), pp 56–57. Compare, G. Mousourakis, *Fundamentals of Roman Private Law* (Heidelberg: Springer 2012), p 143. According to Mousourakis, the relevant distinction was between solid and liquid materials, rather than separable and inseparable objects. For example, the mixing together of

25. In *confusio*, the starting point was the co-ownership rule.[15] In *commixtio*, too, commingled objects became co-owned where the original owners had consented to them being mixed together. In the absence of consent, the original owners retained their respective ownership.[16] The rules of *commixtio* applied even if it was in practice impossible to tell which objects in the mixture had initially belonged to which owner. Roman law provided special rules for these situations. George Mousourakis describes how an owner not in possession of the mixture could raise an *actio in rem* with the result that the judge resolved the issue by dividing the mixture and allocating the parties objects to be owned separately.[17]

26. The idea of continuing ownership may underpin the following reasoning:

> Person A owns and is in possession of five apples in a bag. Person B, too, has a bag with five apples in it. Next, all five of A's apples are put into the bag in B's possession. Finally, person C takes five apples from B's bag. As a result, it is possible that either B or C possesses all of the apples belonging to A, or that B and C each possess part of A's apples. For A to be able to request that the apples belonging to A be returned to A's possession, A should be able to tell which particular apples belong to A. This is the case, say, if A's apples and B's apples are of different variety and their differences, such as colour or shape, are easily discernible.

27. This reasoning is valid as a starting point. In some situations, the continuing existence of the original objects means that nothing changes in terms of ownership. In Alexander Waghorn's terminology, we can speak of a merely 'factual' (and not 'legal') mixture, where no 'evidentiary difficulty' exists on which objects belong to which party.[18] Still, in other situations it may be excessively difficult or even impossible to tell which objects belonged to which person before the objects were mixed together. In those situations, the co-ownership rule is a plausible starting point. Depending on one's theoretical starting points, the mixture as a whole or each individual item in the mixture can be understood as a co-owned object.

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molten metals was regarded as *confusio* due to the liquid form of the metals, even though the resulting mixture was separable. He notes that the term *commixtio* is absent in Roman legal sources.

15 C. Anderson, *Roman Law Essentials*, p 57. Compare, G. Mousourakis, *Fundamentals of Roman Private Law*, p 143. Mousourakis excludes separable mixtures, such as those of molten metals, from the co-ownership rule.

16 C. Anderson, *Roman Law Essentials*, pp 56–57; G. Mousourakis, *Fundamentals of Roman Private Law*, p 143.

17 G. Mousourakis, *Fundamentals of Roman Private Law*, p 143.

18 A. Waghorn, 84. *MLR* 2021, pp (61) at 63–64.

28. While the distinction between *commixtio* and *confusio* is useful in some respects, it should not dictate the role of the co-ownership rule. Indeed, the co-ownership rule may provide the most plausible outcome despite the continuing existence of the original objects. The same reasons that underpin the co-ownership of oil after commingling may be equally relevant with respect to objects such as apples or grain. It has also been argued that no logical reason demands the distinction between *commixtio* and *confusio* where it is practically impossible to separate the original objects from each other. Even though oil was subject to the rules of *confusio*, it is now known to consist of molecules that can be juxtaposed with grain and other small but visible granular objects, which were subject to the rules of *commixtio.*[19]

3.3. Possession

29. Tangible movables are typically by nature capable of being possessed. Let us return to the example at the beginning of section 3.1. Recall that A owns 500 litres of oil, kept in a container. This time, though, the container is in A's immediate possession when commingling occurs. C, who possesses a container with 500 litres of identical oil belonging to B, accidentally empties that container into the container in A's possession. Commingling occurs, and A is in possession of a container with 1000 litres of oil.

30. In cases like this, it seems reasonable to ask whether the possessor should become the sole owner of the commingled whole. The same applies even to objects that retain their initial nature, so that they can be owned separately. Interestingly from a historical perspective, possession was an important factor in Roman law on commingling of coins. According to Mousourakis, the possessor became the sole owner of a mixture of coins, regardless of whether mixing had been deliberate. The non-possessing original owners could only claim the value of the coins they lost.[20]

31. The significance of possession can be justified to some extent by striving for an efficient outcome. One may argue that co-ownership should be avoided because it forces people to work together, which in turn may cause conflicts and unnecessary costs. This is a serious argument, but its significance is debatable.[21]

32. Application of the co-ownership rule could easily be limited by adopting a rule to the effect that the possessor becomes the sole owner. In our example, before commingling took place, A was free to use the oil in any way to which an owner is entitled. In contrast, the rules on co-ownership may require the co-owners to make certain decisions and perform certain acts together. In particular, bringing

19 A. Waghorn, 84. *MLR* 2021, p (61) at 66.
20 G. Mousourakis, *Fundamentals of Roman Private Law*, p 143.
21 A. Waghorn, 84. *MLR* 2021, p (61) at 77.

co-ownership to an end may call for co-operation. If the relevant rules are like this, one could argue that a solution preferable to co-ownership would be sole ownership in favour of the person in possession, with an obligation to compensate the loss of other original owners. If possession is made the decisive factor, then the relevant point in time should probably be that of commingling or immediately after it, so that a later change of possessor would not cause changes in terms of ownership.

33. However, the rules on co-ownership may be different. In our example, A could be entitled to unilaterally end the co-ownership simply by taking 500 litres of oil from the container and keeping this portion separate with the idea that it belongs to B. In a legal system that grants this kind of entitlement, the efficiency arguments for preferring possessor sole ownership over co-ownership are weaker.

34. Some practical issues may remain even if the possessor is entitled to divide the mixture. In particular, how does one know the correct portions? When quantities of oil commingle, it may be very difficult to tell what the original quantities were at the time of commingling. Objects such as bank money, book entries, or virtual currency are less problematic. Although account-based assets cannot be possessed similarly to tangible movables, it is possible to draw parallels if we emphasize the nature of possession as factual control over an object. It is generally easy to observe the quantities in the bookkeeping of transfers.

3.4. Differences in Quantity or Quality, and Hence in Value

35. The examples discussed so far have been simplified in that the commingled objects are identical in quantity and quality. In reality, objects may be of different value due to differences in quantity or quality, or both. On this basis, one could argue that in some cases one of the original objects should be regarded as the 'principal part', whose owner should become the sole owner of the mixture.

36. The 'principal part rule' is widely used in connection with combinations such as pieces of metal welded into a ship's hull or a vehicle frame. For example, under section 947 of the German Civil Code, the starting point is co-ownership when movable things are combined so that they become essential parts of the whole thus formed. However, if one of the things is regarded as the principal part or 'main thing' (*Hauptsache*), then the original owner of that thing becomes the sole owner. Based on the text of the Civil Code, the same rules seem to apply to commingling. Under section 948, the provisions of section 947 apply accordingly when movable things have commingled either inseparably or so that separation would cause disproportionately high costs. Section 948 covers – and appears to treat similarly – *Vermischung* and *Vermengung*, which originate from *confusio* and *commixtio.*[22]

22 J.T. Füller, '§ 948 Vermischung', in F.J. Säcker et al. (Hrsg.), *Münchener Kommentar zum Bürgerlichen Gesetzbuch*, Band 8 (München: C.H. Beck, 8th edn 2020), para. 1.

37. Whether the principal part rule is justified depends largely on the practical outcomes of co-ownership and sole ownership. Here, the rules on co-ownership in the legal system in question are of particular relevance. For example, consider that person A accidentally transfers bank money, book entries, or virtual currency to person B's account, although the transfer was intended for person C's account. If the applicable rules prescribe co-ownership but allow account holder B to use the assets up to B's own part, then the co-ownership rule seems unproblematic from B's perspective. In a system like this, the arguments for the principal part rule seem weaker than in a system where the co-ownership rule is in effect more burdensome on B. Generally speaking, the principal part rule is a way to avoid the co-ownership rule if the co-ownership rule fails to yield efficient outcomes. Therefore, it may serve the same function as possession discussed in section 3.3.

38. For the principal part rule to be applicable, the notion of principal part must be defined. As regards interpreting section 948 of the German Civil Code, the role of quantitative considerations is unclear. What is clear, though, is that a larger quantity does not automatically equate to the principal part when objects of identical characteristics commingle.[23] In our view, the same should apply more generally. If commingling of 500 and 500 litres of oil results in co-ownership, then that should also be the case with 500 and 501 litres, or 500 and 600 litres.

39. The difficulty of defining the principal part can be turned into an argument against the principal part rule, for no definition is needed without the rule.

3.5. Results of Analysis

40. In the introduction we set two presumptions. One is the absence of any relevant agreement between the persons involved or equivalent unilateral disposition. The other is that while it is either impossible or unreasonably costly to separate the original objects, it is both possible and economically reasonable to divide the whole that results from their commingling. The analysis above in section 3 suggests that the co-ownership rule is generally a rationally justifiable solution in situations delineated by the two presumptions. Therefore, it should be widely applicable in legal systems that recognize co-ownership and start with the premise that to own something requires a specific object.

41. This result resonates with the Draft Common Frame of Reference (DCFR) VIII. – 5:202(1), which provides as follows:

> Where goods owned by different persons are commingled in the sense that it is impossible or economically unreasonable to separate the resulting mass or

23 *Ibid.*, para. 6.

mixture into its original constituents, but it is possible and economically reasonable to separate the mass or mixture into proportionate quantities, these persons become co-owners of the resulting mass or mixture, each for a share proportionate to the value of the respective part at the moment of commingling.

42. This model rule only applies directly to 'goods', defined as corporeal movables (VIII. – 1:201). However, Book VIII of the DCFR 'applies, with appropriate adaptations, to banknotes and coins that are current legal tender' (VIII. – 1:101 (5)).

43. What the analysis above also suggests is that the broader legal context (specific legal system) matters when comparing the merits of the co-ownership rule and its alternatives or considering the need for modifications to the co-ownership rule. The question whether co-ownership can easily be ended is particularly important. This can also be observed in Book VIII of the DCFR, where the co-ownership rule (VIII. – 5:202(1)) is paired with a rule under which '[e]ach co-owner can separate a quantity equivalent to that co-owner's undivided share out of the mass or mixture' (VIII. – 5:202(2)).

44. While our analysis is restricted to default rules addressing commingling, it should be noted that the factual circumstances of commingling may give rise to questions on the applicability of those rules. For example, if the co-ownership rule is accepted as the relevant default rule, should it be disapplied if the owners of the original objects have approved commingling or the possibility thereof, at least in some situations? We will not discuss this further here, but Book VIII of the DCFR appears to answer in the negative. It starts with the notion that the consequences of commingling 'can be regulated by party agreement'. However, the default rules on commingling apply even where commingling occurs 'with the consent of the owner of the material, but without party agreement as to the proprietary consequences' (VIII. – 5:101(1)).

4. Finnish Law

4.1. Legal and Doctrinal Starting Points

45. The most important piece of legislation in Finland on co-ownership is the Co-ownership Act (180/1958), which applies when two or more people together own, in shares, real estate, a movable object or other goods. The Act does not specifically deal with commingling but takes the existence of co-ownership as a starting point. Finnish law includes no general statutory rules on how co-ownership may come into existence.

46. The prevailing view in the older legal literature suggested the co-ownership rule, or something similar to it, to be the general rule. Several scholars accepted the co-ownership rule at least to a certain extent, regardless of whether

commingling could be classified as *commixtio* or *confusio.*[24] The legal scholars of the past were quite familiar with the German Civil Code, and the prevailing view was close to the solutions adopted in it. Today, their writings are largely outdated. Besides changes in statutory law, commingling has been addressed extensively in case law in recent decades.

47. The prevailing view in the older legal literature found the co-ownership rule applicable regardless of possession of the whole. A differing view came from Yrjö J. Hakulinen. According to him, the original owners co-owned the whole in the case of commingling of jointly possessed objects or objects in the possession of an outsider. Otherwise, the possessor became the sole owner. Hakulinen's view was mainly based on certain insolvency law provisions, under which the original owner only had a claim for monetary compensation if a good in the debtor's possession had commingled with the debtor's property and become inseparable from that property.[25]

48. Those provisions have been repealed, but the current Bankruptcy Act (120/2004) includes a similar rule. Under Chapter 5, section 6 of the Bankruptcy Act, a third party's property in the debtor's possession does not belong to the bankruptcy estate, but only if that property can be separated from the debtor's property. The drafters regarded this rule as being in accordance with the then existing provisions and the general principles of property law. The idea was that the debtor's assets and third-party assets become unidentifiable if they commingle with each other.[26]

49. It looks as though the drafters had not given any thought to the co-ownership rule. Yet they were certainly aware that co-ownership is recognized under Finnish law. Co-ownership is regularly dealt with in insolvency, while typically only the debtor's share of a jointly owned object belongs to the bankruptcy estate. For example, if A and B buy a quantity of oil to be owned together in equal shares, half and half, only one half belongs to B's bankruptcy estate, even if B alone is in possession of the whole quantity.[27] The same should apply if A and B decide to sell

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24 J. Serlachius, *Sakrätten enligt gällande finsk rätt* (Helsingfors: Söderström & C:o Förlagsaktiebolag, 3rd edn 1916), p 169; I. Caselius, *Sopimukseen perustuvat irroittamisoikeudet. Varallisuusoikeudellinen tutkimus Suomen voimassaolevan oikeuden mukaan* (Helsinki: I. Caselius 1934), pp 330–332; R.A. Wrede & I. Caselius, *Esineoikeuden pääpiirteet Suomen oikeuden mukaan I* (Helsinki: Söderström & C:o, 2nd edn 1946), p 234.

25 Y.J. Hakulinen, *Perusteettoman edun palautus. Siviilioikeudellinen tutkimus* (Helsinki: Y.J. Hakulinen 1931), pp 280–281.

26 Government Proposal 26/2003, p 74.

27 Under the main rule in Ch. 5, s. 1 of the Bankruptcy Act, the property that the debtor has in the beginning of bankruptcy and the property that the debtor acquires before the conclusion of bankruptcy shall be property of the bankruptcy estate. As noted in Government Proposal 26/2003, p 70, substantive civil law determines the conditions under which property belongs to the debtor.

the oil to C, who pays for the oil with one 500 euro note. As a starting point, the note belongs to A and B together. It also seems unimportant whether C pays with one 500 euro note or, say, five 100 euro notes. The cash is jointly owned, even if B is in possession of the banknotes, and regardless of whether B is in possession of the one or the five banknotes. Moreover, co-ownership seems plausible even if A has given B the right to take care of selling the oil, including receipt of cash with the purpose that the cash becomes jointly owned by A and B. If the co-owned object is not found (identified), the co-owner not in possession is not, for practical reasons, entitled to protection under Chapter 5, section 6 of the Bankruptcy Act.

50. In the context of commingling, the drafters chose a different path. They probably omitted the question what commingling of objects entails theoretically. The question of ownership was also set aside, which is not unusual as such in Finland, where legislation does not address ownership, including acquisition and loss of ownership, in the same way as in major civil law countries in Europe. Finnish legislation is fragmented and often addresses specific issues, such as those arising from an unauthorized transfer, or the transferee's position in relation to the transferor's creditors.[28] As a result, many issues are dealt with pragmatically. Put simply, the idea is to recognize the practical problem at hand and resolve it more directly than through ownership.[29] For example, if a bankrupt debtor holds an object belonging to another person, is that person entitled to receive the object from the bankruptcy estate? In drafting Chapter 5, section 6 of the Bankruptcy Act, the starting point was probably to ask whether a third party enjoys a 'right to separate' if commingling has occurred.

51. The possibility of applying the co-ownership rule has seldom been addressed in Finnish case law. This is different from Swedish case law, with which Finnish scholars and Finnish Supreme Court justices are often familiar due to historical reasons and similarities in legislation. For example, in judgment NJA 2009 p. 500, the Swedish Supreme Court took into account that the right to separate could be based on the existence of co-ownership. However, the Supreme Court held it to be

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28 See e.g., Trade Code (3/1734), Ch. 11, s. 4; Promissory Notes Act (622/1947), ss 14, 22, and 31; Real Estate Code (540/1995), Ch. 13, ss 3 and 4.

29 Notwithstanding the simple starting point, rather complex theories have been developed for analysis of the concept of ownership and transfer of ownership. See in particular, S. Zitting, *Omistajanvaihdoksesta silmällä pitäen erityisesti lainhuudatuksen vaikutuksia* (Helsinki: Suomalainen Lakimiesyhdistys 1951). Zitting's theories are still highly regarded. While unique in some respects, they can be classified under the so-called Nordic functional approach. Zitting was influenced by a school of thought known as Scandinavian Legal Realism, which also had an impact on the functional approach developed in the other Nordic countries. See e.g., K. Rakneberg Haug, 'The Historical Development of the Scandinavian Functional Approach to Transfer of Ownership: A Tale of Change and Continuity', 6. *EPLJ (European Property Law Journal)* 2017, p 236, doi: 10.1515/eplj-2017-0011

the general rule that the right to separate ceases if fungible property is commingled with fungible property of a similar kind belonging to the possessor.

52. Common Nordic tradition in property law scholarship has it that different aspects of ownership should be studied separately.[30] The existence of the right to separate under insolvency law is just one question.[31] Other questions include whether the possessor of the whole has competence to sell or donate the whole so that the buyer or recipient becomes the owner of the whole without any third-party issues.[32]

53. In recent Finnish Supreme Court cases, this Nordic tradition appears to have been set aside to some extent. To start with judgment KKO 2021:36, it looks as though the Supreme Court has adopted at least partially the view for which Hakulinen argued. The Supreme Court states that under property law rules the immediate legal effect of commingling of account-based assets is that the assets transferred belong to the account holder.[33] Here, the Supreme Court does not refer to any legislation, but only to its earlier statements in case law.[34]

54. It is important to note that the Supreme Court was addressing account-based assets. While the focus has been on bank money, the notion of account-based assets must be understood more broadly in this context. Besides bank money, bitcoin and similar crypto assets are presumably also included.[35] In addition, it would be difficult to argue for exclusion of book entries forming part of the Finnish book-entry system.

55. The Supreme Court's statement in KKO 2021:36 suggests that sole ownership of the account holder requires nothing else besides commingling. However, the Supreme Court appears to have qualified this position in judgment KKO 2022:46, as follows. If an account holder is not under obligation to keep assets

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30 See C. VON BAR & E. CLIVE (eds), *Principles, Definitions and Model Rules of European Private Law*, Volume 5, p 4380.

31 In the Nordic countries, the right to separate is indeed often studied separately. In Sweden, a very important starting point is the principle of specificity (*specialitetsprincipen*) which reflects the traditional view that only individual objects can be objects of certain rights, such as ownership. However, some scholars add another aspect to this principle. See e.g., T. HÅSTAD, *Sakrätt avseende lös egendom* (Stockholm: Norstedts Juridik, 6th edn 2002), p 152, where the additional aspect is that a person with a claim is entitled to protection as an owner (or a pledgee) only if they can identify the object in another person's hands as the object to which they have the claim.

32 Rules on the rights of third parties are generally understood as mandatory, meaning that parties cannot deviate from them by contract. See e.g., L. KARTIO, *Esineoikeuden perusteet* (Helsinki: Kauppakaari, 2nd edn 2001), p 53; H. HESSLER, *Allmän sakrätt* (Stockholm: P.A. Norstedt & Söners Förlag 1973), p 280.

33 Paragraph 21 of the judgment.

34 KKO 2020:64, paras 12–14; KKO 2020:51, para. 23.

35 See in particular, KKO 2020:64.

belonging to another person separated from the account holder's own assets, then those assets become the account holder's property as a matter of civil law at the time of commingling.[36] It is clear from the circumstances of the case that coins and banknotes (cash, legal tender) are regarded as assets similarly to bank money.

56. In both KKO 2021:36 and KKO 2022:46, the main question was whether the defendant should be sentenced for embezzlement under Chapter 28, section 4(3) of the Criminal Code (39/1889). It is unnecessary here to go into the details of this complex and controversial penal provision. Suffice it to say that, following the Supreme Court's reasoning in these cases, the account holder or possessor who receives ownership as a result of commingling is considered the owner in every sense under civil law. This includes entitlement to sell or donate the whole. However, the owner's failure to pay appropriate monetary compensation to the person who lost ownership and has creditor rights instead may result in a criminal charge.

57. As regards insolvency law, the main focus has been on bankruptcy-related issues. In KKO 2020:64, the Supreme Court stated explicitly that commingling of funds in a bank account and its significance should be assessed in attachment (in enforcement of a payment obligation) similarly to how it is assessed in bankruptcy.[37] In this case, funds belonging to person A had been transferred to person B's bank account, and B had used the funds, as agreed with A, to buy bitcoins, holding the bitcoins on A's behalf in an account maintained by a company. The account was in B's name and under B's control. The Supreme Court held that, in attachment, bitcoins in an account maintained by a service provider should be treated similarly to funds in a bank account.[38]

4.2. A Closer Look at Case Law

58. Recent case law suggests that at least some situations fall outside the scope of the co-ownership rule. Indeed, it is not certain that the co-ownership rule applies at all. Nevertheless, it appears relatively clear that at least in some cases the outcome must follow the co-ownership rule. For example, consider two quantities of identical oil, owned by different persons, commingling in the hands of a third party. Besides the older legal literature referred to in the previous section, more recent literature has widely acknowledged the co-ownership rule at least in situations like this.[39]

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36 Paragraph 11 of the judgment.

37 Paragraph 14 of the judgment.

38 Paragraph 19 of the judgment.

39 See e.g., J. Tuomisto, *Omistuksenpidätys ja leasing. Varallisuusoikeudellinen tutkimus omistuksenpidätysehdosta ja leasingsopimuksesta tavarantoimittajan ja rahoittajan vakuuskeinoina* (Helsinki: Suomalainen Lakimiesyhdistys 1988), pp 316–317; L. Kartio, *Esineoikeuden*

59. A closer look at case law shows that many questions lack a clear answer. First, how should we understand the concept of commingling? When considering this, we should note that the Finnish Supreme Court may have started its reasoning, at least in some cases, from a rule like 'if commingling occurs, the right to separate in the event of bankruptcy ceases'. The Supreme Court may then have considered whether the facts of the case amount to commingling in a relevant sense. Here, the concept of commingling may have been something other than 'impossible to separate, or only at unreasonable cost'.

60. It may be impossible to draw undisputable conclusions from the Supreme Court's reasoning in cases decided over several decades. In some cases, the Supreme Court has discussed quite extensively whether commingling has occurred. These discussions seem excessive if we understand commingling as a situation where it is either impossible or economically unreasonable to separate the original objects. Then again, we cannot be sure that the Supreme Court has understood the concept of commingling similarly in all its cases. The legal community probably understands the Supreme Court's reasoning quite straightforwardly. We are dealing with commingling, say, when a person transfers 10000 euros by mistake to the wrong bank account containing 10000 euros belonging to the account holder before the transfer. Recent case law suggests that this reflects the Supreme Court's current thinking, too. For example, in KKO 2020:51, the Supreme Court stated that when account-based assets have been transferred to another account, their commingling immediately results in them becoming the account holder's property. In this particular case, the assets (funds in a bank account) had been transferred voluntarily to an account held by a person who should have returned them upon request.

61. Another unclear question is whether the rules on the sole ownership of the possessor also apply to objects other than account-based assets and cash. Consider a situation where person A, in possession of a container with 500 litres of oil in it, accidentally adds into the same container 500 litres of similar oil belonging to person B. As noted above, the co-ownership rule should definitely be adopted if the container was in the possession of an outsider. A could later receive possession of the object, but this would not cause changes in terms of ownership. In the event of A's bankruptcy, A's share of the jointly owned object, but no more than that, would belong to the bankruptcy estate.

62. Of course, a co-ownership share can be transferred as well, including by way of sale. In the case of objects like oil, the transferee may become the owner of the share

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perusteet, p 218; J. Kaisto & J. Tepora, *Esineoikeus eurooppalaistuvassa Suomessa. Esineoikeuden oppikirja oikeustoimiopillisin ja prosessioikeudellisin lisäyksin* (Helsinki: Lakimiesliiton kustannus 2012), pp 308–315.

so that the transferor's creditors, too, must respect that ownership. For example, if person A, owning a quantity of oil in a container, sells half of that oil to person B, then only A's remaining share of that oil belongs to the bankruptcy estate in the case of A's possible bankruptcy, even if A is still in possession of the whole.

63. We argue that the co-ownership rule should be the starting point in commingling situations, unless statutory or case law indicate otherwise, for this is the most rational solution in the light of the analysis in section 3 above. We reject the principal part rule, while admitting that it may be plausible in some special circumstances. That said, we consider it clear that a commingling of 300 and 600 litres of identical oil involves no principal part in this sense, to give an example. In contrast, it seems conceivable that the Supreme Court could apply the principal part rule in a situation where an objectively insignificant quantity has commingled with a substantially larger quantity, provided that the Supreme Court regards co-ownership as the starting point in its reasoning.

64. In our view, the co-ownership rule should generally apply with respect to objects other than those dealt with by the Supreme Court. We also argue that the co-ownership rule should apply where account-based assets or cash are in the possession of an outsider or in joint possession. This should be the starting point in insolvency law as well. This interpretation does not seem to contradict the recent case law of the Supreme Court. Admittedly, though, it is not in accordance with judgment KKO 2001:138. In that case, funds (US dollars) in company X's account had been attached because the bailiff had gathered enough evidence to presume that the funds belonged to A, the debtor in the case. After the attachment, B claimed to own those funds. The Supreme Court held that B's ownership of the funds could not be ascertained due to commingling of funds. As a result, the attachment was upheld.

65. Notwithstanding this judgment, we argue in favour of co-ownership, with the result that only a share should belong to those who owned the original objects. As explained in section 4.3 below, this rule must be followed with respect to client assets. Yet the same should apply as a general rule.

66. If no commingling has occurred, the original owner remains the owner even if the situation involves transfer of account-based assets or cash. An interesting case in this regard is KKO 1993:132, where person A had transferred funds to person B's bank account by mistake. The Supreme Court would have granted A the right to separate the funds in B's bankruptcy (but separation was no longer possible due to bank set-off). No funds belonging to B had been in B's bank account at the time of A's transfer, and none had been transferred to that account thereafter. Therefore, the funds belonging to A would have been identifiable. It is also stated in the preparatory works for

the Bankruptcy Act that funds transferred to the debtor's bank account may be identifiable in some cases.[40]

67. The account holder is not entitled to dispose of funds in the account that do not belong to the account holder. In KKO 1998:45, the Supreme Court held that a transferee of funds may enjoy good faith protection based on the principles behind section 14 of the Promissory Notes Act (622/1947).[41] In the case of commingling, though, these principles seem to have no significance if we start from the premise that assets belong to the possessor. The same applies to section 27 of the Act on Book-Entry Accounts, which provides that a transferee of a book entry or a right in a book entry may be eligible for good faith protection. A condition for this is that the person transferring the book entry or the right was entitled to do so according to the information recorded in the relevant book-entry account. One may ask whether the formulations in more recent case law, especially in KKO 2021:36, can be taken seriously in this light. Then again, it is not entirely clear what concept of commingling the Supreme Court has had in mind in those cases.

68. As noted above, the case law may have to be understood so that commingling occurs in a relevant sense, say, if person A accidentally transfers 10000 euros to person B's bank account that already contained 10000 euros of B's money at the time of transfer. Following this interpretation, account holder B owns all 20000 euros in the account. Now, what if B had 5000 euros, or 100 euros, or just 1 euro in the account before A's transfer of 10000 euros?

69. Some scholars have argued that commingling does not occur in a relevant sense, at least in the insolvency law context, if assets belonging to another person are mixed with an insignificant amount of the account holder's assets.[42] This would mean that the results could differ depending on the amounts involved. While the purpose of this solution is understandable, nevertheless it could lead to random and ill-justified outcomes. If the relation between the amounts was decisive, it would be difficult to explain why a large company accidentally transferring a large sum should be treated more favourably than a private person accidentally

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40 Government Proposal 26/2003, p 74. Neither KKO 1993:132 nor the preparatory works for the Bankruptcy Act address the question whether the owner of the funds could have a claim directly towards the bank. To our understanding, a person may be the owner of funds in a bank account under Finnish law even in the absence of that possibility.

41 This section addresses negotiable promissory notes, such as notes payable to bearer. The conditions for good faith protection are transferor's possession, transferee's well-founded good faith (did not know and ought not to have known), and transferee taking possession (*constitutum possessorium* does not suffice). In the case of bank money, these conditions are met if the transferee was in well-founded good faith when receiving the payment. See KKO 1998:45.

42 See e.g., R. Koulu, 'Tilimaksun saajan suojasta', XXIV. *OTJP (Oikeustiede–Jurisprudentia)* 1991, p (197) at 242.

transferring a small sum. It is also unclear whether the existing case law leaves room for a 'rule of relevance'.

4.3. Client Assets

70. Many kinds of businesses hold assets belonging to their clients, one way or another. Examples include lawyers, real estate agents, and financial service providers. Several pieces of Finnish legislation deal with handling client assets. For example, under section 5(3) of the Advocates Act (496/1958), an advocate (attorney) must keep funds and other assets belonging to clients separate from the advocate's own assets.

71. Legislation usually only requires that assets belonging to the business must not be mixed with client assets. This implies that keeping assets belonging to several clients in one and the same bank account may be allowed. For example, attorneys generally use joint accounts for their clients' funds. However, under the guidelines of the Finnish Bar Association, a separate account for a client is required in certain circumstances.[43]

72. In many cases, keeping assets belonging to several clients in the same account is the only solution that makes practical sense. In these arrangements, we suggest, drawing on the considerations in section 3 above, that the assets belonging to the clients should be regarded as being co-owned by the clients. Accordingly, each client would only own a share of the whole. If a client were to go bankrupt, only that client's share would belong to the bankruptcy estate. In turn, in the case of a partial loss or shortage of assets in the whole, all clients would lose in proportion to their shares.

73. Some pieces of legislation address the question of assets belonging to several clients. Importantly, this is the case with the Investment Services Act (747/2012). Under Chapter 9, section 1 of the Act, an investment firm must especially ensure that its own assets are kept clearly distinguished from client assets. However, the same section requires an investment firm to keep reliable records of client assets so that each client's assets are adequately distinguished from other clients' assets. It seems plausible to interpret this section as meaning that, for example, keeping all client funds (but not the investment firm's own funds) in the same bank account is allowed. Of course, the investment firm's internal bookkeeping must unequivocally connect clients and their rights. The obligation to distinguish assets is usually meant to ensure that clients are protected from the business's creditors. In some cases, this obligation stems from EU legislation.[44]

74. The rules on commingling remain unharmonized in the EU. Moreover, the measures required to protect client assets may vary between Member States. Under

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43 Guideline B 06.1, 5 Jun. 2009, last amended 20 Jan. 2022.

44 See e.g., Art. 16(8) of Dir. 2014/65 of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU (recast) [2014] OJ L 173/349.

Finnish law, the traditional way to provide protection is to require that client assets are kept separate from assets belonging to the business.[45] These rules offer some support for denying the right to separate when client assets are mixed with assets belonging to the business. In turn, the case law studied in sections 4.1 and 4.2 suggests considerable risks for clients if commingling occurs. For example, if a bank account is in the factual control of a business, then all assets in that account belong to the business as a result of commingling. Here, it is unlikely to have legal relevance whether the account has been named a 'client account' in an agreement with the bank.

75. Nevertheless, it cannot be convincingly argued that the case law is justified because of the way the custody of client assets is regulated. Granted, the prohibition on mixing client assets with assets belonging to the business reduces the risks that clients would otherwise face under insolvency law rules. Still, the focus in drafting may have been on risk reduction without taking a position on how exactly the insolvency law rules should be interpreted.[46]

76. Commingling may occur regardless of the obligation to keep assets separate. This seems to pose a risk to clients, unless special provisions are in place to protect them. These provisions are rare, but not non-existent. One of the most important instances from a practical point of view is the Act on Securities Accounts (750/2012), which applies to custodian services in certain specific situations.[47] Securities accounts indicate the type and number of securities kept on behalf of account holders. Under section 10(1) of the Act, the custodian must see to it that it continuously holds the securities that match the information in the securities accounts, as more specifically agreed with the account holders. Put simply, if a custodian has 1000 account holders with a total of 100000 Nokia shares according to the information in the securities accounts, then the custodian must have 100000 Nokia shares to cover the account holders' rights. Section 10(2) requires the custodian to follow other applicable rules on keeping and handling client assets. For example, the rules in Chapter 9 of the Investment Services Act may apply.

77. Section 11(1) of the Act on Securities Accounts declares that the securities held by a custodian on behalf of the account holders do not belong to the custodian's bankruptcy estate. They also cannot be attached to pay the custodian's debt.

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45 In Finland, no specific rules exist on trusts that could afford clients additional insolvency protection. In practice, trust-related questions have arisen in cross-border cases. See e.g., T. Mikkola, *Yhteisomistus* (Helsinki: Alma Talent, 2nd edn 2016), pp 193–204.

46 See e.g., Government Proposal 199/1996, p 16; Government Proposal 61/2000, p 20. Both emphasize that if client assets are not kept separate from assets belonging to the business, a risk exists that the client assets may be attached to pay the business's debt or be regarded as belonging to the business's bankruptcy estate.

47 The Act on Securities Accounts was drafted with the intention of meeting the central requirements of the UNIDROIT Convention on Substantive Rules for Intermediated Securities, i.e., the Geneva Securities Convention of 2009. See Government Proposal 32/2012, pp 63 and 251.

In addition, the securities held by the custodian, which match the securities recorded in clients' securities accounts, are considered to be held on behalf of the clients, unless proven otherwise.

78. It is not entirely clear whether clients can be regarded as owners of the securities held on their behalf. Be that as it may, those securities may become mixed with securities belonging to the custodian. According to the preparatory works, clients should not lose the protection provided by section 11(1) despite commingling in this sense.[48] All in all, it seems that clients may be protected against the custodian's creditors despite commingling in the same way as suggested in this article.

79. If section 11 and the preparatory works did not exist, we would have to ask whether the general rules on insolvency law apply. Our findings in sections 4.1 and 4.2 above suggest that the legal position of clients could be precarious insofar as account-based assets are concerned. In many cases, a custodian holds securities in a Finnish book-entry account, or otherwise holds assets that must be regarded as account-based. Following the case law studied above, the client would lack protection against the custodian's creditors because commingling would result in the custodian becoming the owner of the whole.

80. Because of section 11, the applicability of the general rules of insolvency law is not really a problem. However, this question needs to be addressed in terms of client assets that are not protected by 'client-friendly' special rules. To categorically deny protection against the creditors of a business seems harsh and unjustified. Yet the same is true more generally. If a private person accidentally transfers all their life savings to the wrong bank account with the account holder's funds in it, would it not be grossly unfair to decide that all the funds belong to the account holder? The implications of sole ownership could be drastic to the private person.

81. As regards client assets, discussion is being fuelled by some technological innovations and related law and practice. One focal point has been virtual currencies. In Finland, the most important piece of legislation addressing these is the Act on Virtual Currency Providers (572/2019). The Act implements the virtual currency-related requirements of the 5th Anti-Money Laundering Directive,[49] but goes further than that in many respects. Section 11 of the Act regulates custody of client assets, starting with the notion that a virtual currency provider must 'safeguard' those assets.[50] However, the regulation includes several unclarities.

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48 Government Proposal 32/2012, p 265.

49 Dir. 2018/843 of 30 May 2018 amending Directive (EU) 2015/849 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing, and amending Directives 2009/138/EC and 2013/36/EU [2018] OJ L 156/43.

50 Under s. 2(1) of the Act, 'virtual currency providers' are defined as virtual currency issuers, virtual currency exchange services and their marketplaces, and wallet service providers.

82. In the literature commenting on the Act, Jon Hautamäki, Max Atallah and Karri Koskikare have proposed that the legal requirements for custody of virtual currencies are met if the virtual currencies belonging to clients can be separated by way of internal bookkeeping. The same would apply to cash, monetary value recorded in an account, and electronic money.[51] The authors seem to think that virtual currencies can be safeguarded under section 11(1) even if the virtual currency provider intentionally keeps virtual currencies belonging to clients in the same account or address as its own virtual currencies. The same would concern other types of client assets.[52] The problem with this view is that, following the case law discussed in sections 4.1 and 4.2 above, the account holder (virtual currency provider) is likely to be regarded as the owner of the whole. The Act on Virtual Currency Providers contains no special rules on this matter. As a result – and most importantly – clients would probably not be protected in the event of the virtual currency provider's insolvency.

83. Due to the growing economic significance of digital assets and related services, the question of commingling of virtual currencies, like the corresponding question about money, is not without importance. The digital assets industry has problems of its own, and stories about businesses in or close to financial peril are commonplace in the news. High-profile cases in the field include *Ruscoe* v. *Cryptopia* of the New Zealand High Court.[53] In studying these cases, traditional starting points have to be considered carefully and with an open mind.[54]

84. Let us presume that section 11 of the Act on Virtual Currency Providers should be interpreted the way Hautamäki, Atallah and Koskikare have understood it.[55] This is not entirely out of the question. If the requirements of section 11 can be met even though a virtual currency provider is entitled to commingle objects, it seems problematic to follow the general rules developed by the Supreme Court. Insofar as client assets are concerned, an intuitively fair and reasonable starting point is that clients should be protected at least in the event of the business's insolvency. We would be in a situation where it is sufficient for the purposes of the Act on Virtual Currency Providers to keep internal records of rights in the commingled whole, but where as a matter of civil law the virtual currency provider owns

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51 J. Hautamäki, M. Atallah & K. Koskikare, *Virtuaalivaluutan tarjoaminen – käsikirja virtuaalivaluuttalain soveltamiseen* (Helsinki: Edita Publishing 2019), pp 96–98.

52 *Ibid.*

53 *Ruscoe* v. *Cryptopia Ltd (in liquidation)* [2020] NZHC 728, 8 Apr. 2020.

54 See e.g., M. Solinas, 84. *MLR* 2021, p 155; G. Cone, N.S. Bjorklund & G.C. Dyekman, 'Digital Assets and Property Rights in Insolvency', 27. *TT (Trusts & Trustees)* 2021, p 406, doi: 10.1093/tandt/ttab051.

55 Compare, J. Kaisto & E. Paukku, 'Virtuaalivaluutat, niihin liittyvät palvelut ja asiakasvarojen säilyttäminen', *LJ (Liikejuridiikka)* 2022(3), p 8.

all the assets in it. The question arises whether we should follow the co-ownership rule instead of the rules developed in case law.

5. Conclusion

85. Commingling and ownership pose difficult questions. Some of these are theoretical. For example, if two batches of identical footballs commingle, what is the object of ownership? 'Each football individually' or 'all the footballs as a whole' are both plausible answers. As regards the commingling of objects such as oil, it seems clear that the resulting whole has to be regarded as the object of ownership.

86. Regardless of the nature of the commingled objects, it may prove either impossible or unreasonably costly to separate the original objects. These situations call for deciding who owns the whole, or who owns the individual objects making up the whole. In this article, we set out to study co-ownership as a solution to commingling. Our analysis suggests that what we call the 'co-ownership rule' is generally a rationally justifiable solution and should therefore be widely applicable in legal systems that recognize co-ownership and start with the premise that to own something requires a specific object. However, the broader legal context must be taken into account when comparing the merits of the co-ownership rule and its alternatives or considering the need for modifying the co-ownership rule. Indeed, the legal system in question affects not only whether the co-ownership rule can be adopted in a given situation, but also the extent to which its adoption is rationally justifiable.

87. The result of the analysis resonates with the solution adopted in DCFR VIII. – 5:202. Additionally, we suggest that the co-ownership rule should be followed with respect to account-based assets, such as bank money, book entries, and virtual currencies. Treatment of account-based assets is of great practical relevance and requires a rational solution, especially in terms of protection against the creditors of the party in control of the commingled whole. For the co-ownership rule to apply to account-based assets, the notion of commingling must be accepted with respect to these assets. If the 'physical model' is rejected, say, in connection with bank money, then the notion of commingling of bank money may also be rejected. As a result, the applicability of the co-ownership rule may be considered a question that should not be asked.

88. The Finnish legislator has not addressed questions of commingling and ownership at the general level. In the legal literature, the co-ownership rule has been the traditional starting point. However, some questions have been studied without asking first who owns the commingled whole. For example, does the original owner have the right to separate in case the person in possession or control of the commingled whole goes bankrupt? While this question has been addressed in law drafting, the possibility of co-ownership has largely been ignored.

89. Nordic property law tradition is known for its tendency to resolve separate questions separately. This kind of approach is justified, if not necessary, where legislation contains no general provisions on matters such as how one acquires or loses ownership. In the Nordic countries, legislation is often quite fragmented. The fragmentation of legislation and the theoretical framework entails risks as well. Poorly justified or misunderstood rules may start to dictate solutions to questions not covered by legislation.

90. Looking at Finnish case law, it is difficult to say what the scope of the co-ownership rule currently is. In our view, the co-ownership rule provides a rational starting point, unless otherwise follows from statutory or case law. According to the case law of the Finnish Supreme Court on the matter, the co-ownership rule does not apply to account-based assets in situations where one of the original owners is in possession of the whole at the time of commingling. The same is true for cash. However, the case law is not entirely clear, and it seems questionable whether the Supreme Court can keep the course it has chosen in its recent judgments.